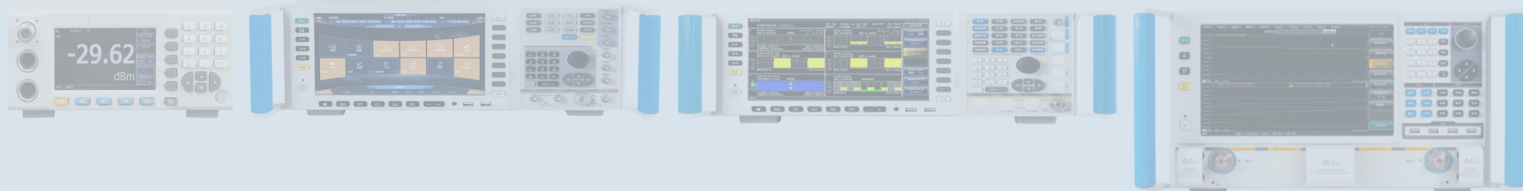


Broadband Microwave and Millimeter-Wave Components Supplier





## About Qualwave Inc.

Qualwave Inc. is the top designer and manufacturer of microwave and millimeter wave products. We supply both active and passive components in a wide frequency range from DC to 110GHz all over the world. We provide a series of standard products to meet the needs of most customers. Meanwhile we customize products according to special requirements.

Our company is equipped with 67GHz vector network analyzers, signal sources, spectrum analyzers, power meters, oscilloscopes, welding platforms, resistance and voltage withstand test instruments, high and low temperature test systems and other research and development, production and testing equipments. Our quality management system has been successfully registered for GB/T19001-2016/ISO9001:2015. Like the name, quality is one of the key success factors. Our products are designed and manufactured with the latest tools and the best quality materials. Our engineers are keeping quality in mind through designing, manufacturing and testing. We are proud that many clients rated five stars in their feedback for product quality.

Our team is comprised of professional microwave and millimeter wave engineers and specialized support staff. We take customer's needs as the first priority, as the success of our customers is also our success. We optimized design and manufacture processes by adding more flexibility, which helps to shorten the lead time. Our management and service are customer oriented, ensuring to response to customer as soon as possible.

## Products

Cable Assemblies	Coaxial Adapters	Connectors	DC Blocks
Detectors	Attenuators	Terminations	Switches
Power Dividers	Couplers	Filters	Circulators/Isolators
Phase Shifters	Amplifiers	Frequency Sources	



Address: 5F, Bldg.1, Tianke Plaza, No.999 Tiangong Ave., Tianfu New Area, Chengdu, 610213, China

Tel: +86-28-6115-4929

Email: sales@qualwave.com

# Table of Contents

## RF Cables & Assemblies

QT-Test Cables.....	1
QA-Ultra Low Loss & Phase Stable, Flexible Cables.....	2
QB-Stable Loss, VSWR, Phase vs Flexing, Flexible Cables.....	4
QG/QH-Economical Flexible RF Cables.....	5
QZ-Ultra-Flexible RF Cables.....	7
QY-Outdoor Use Flexible RF Cables.....	8
QR-Low Loss Wireless Communication Cables.....	9
RG-Low Cost Flexible RF Cables.....	11
QD-Semi-Flexible Cables.....	12
QE-Semi-Rigid Cables.....	13

## Adapters

Coaxial Adapters.....	14
Waveguide to Coax Adapters.....	23

## Connectors

End Launch Connectors.....	24
----------------------------	----

## DC Blocks

DC Blocks.....	28
----------------	----

## Detectors

Detectors.....	29
----------------	----

## Attenuators

Fixed Attenuators.....	30
Rotary Stepped Attenuators.....	39
Continuously Variable Attenuators.....	43
Digitally Controlled Attenuators.....	44
Voltage Controlled Attenuators.....	45

## Terminations

Coaxial Terminations.....	46
---------------------------	----

## Switches

Coaxial Switches【Unterminated】.....	50
Coaxial Switches【Terminated】.....	52
PIN Diode Switches.....	53
Switch Matrix.....	54

## Power Dividers/Combiners

2-Way Power Dividers/Combiners.....	55
3-Way Power Dividers/Combiners.....	61
4-Way Power Dividers/Combiners.....	63
6-Way Power Dividers/Combiners.....	68
8-Way Power Dividers/Combiners.....	69
16-Way Power Dividers/Combiners.....	72
Other Power Dividers/Combiners.....	74

## Couplers

Single Directional Couplers.....	75
Dual Directional/Bi-Directional Couplers.....	79
Hybrid Couplers.....	80

## Filters

Low Pass Filters.....	82
Band Pass Filters.....	83
High Pass Filters.....	87
Band Reject Filters.....	88

## Circulators/Isolators

Coaxial Circulators.....	90
Drop-in Circulators.....	91
Coaxial Isolators.....	92
Drop-in Isolators.....	93

## Phase Shifters

Manual Phase Shifters.....	94
Digital Controlled Phase Shifters.....	96
Voltage Controlled Phase Shifters.....	97

## Amplifiers

Power Amplifiers.....	98
Low Noise Amplifiers.....	102

## Frequency Sources

PLDROs.....	106
-------------	-----

## Other Products

Other Products.....	108
---------------------	-----

## Appendix

Coaxial Switches Power Curve.....	109
-----------------------------------	-----

## Description

QTV series is high precision test cable especially used for VNA with frequency up to 67GHz.

QT series is high performance test cable with features of frequency up to 110GHz, Phase & Loss Stable and Long Flex Life.

The biggest feature of QTE test cable is low price.

The biggest feature of QTF test cable is ultra-flexible.

## Connector Naming Rules

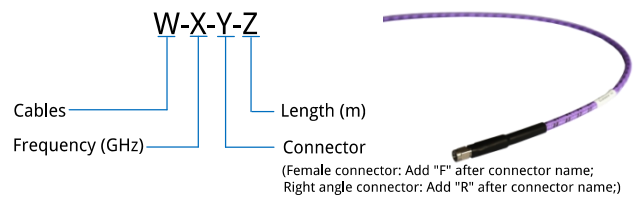
1 - 1.0mm (110GHz)	P - SMP (40GHz)
V - 1.85mm (67GHz)	3 - 3.5mm (33GHz)
G - Mini-SMP (mateable with GPPO & SSMP, 65GHz)	S - SMA (26.5GHz)
2 - 2.4mm (50GHz)	N - N (18GHz)
K - 2.92mm (40GHz)	

## VNA Test Cables

Cables	Freq. (GHz)	Bend Radius (mm)	VSWR (Max)	Phase Stability (±°)	Amplitude Stability (±dB)	Connectors	Loss vs Length (dB, max.)		
							0.6m	0.8m	1m
QTV-V	DC~67	50	1.5	10	0.13	1.85mm	4.91	6.11	7.31
QTV-2	DC~50	50	1.42	8	0.1	2.4mm	3.17	3.85	4.53
QTV-K	DC~40	50	1.35	6	0.1	2.92mm	2.78	3.37	3.96
QTV-3	DC~26.5	50	1.3	5	0.06	3.5mm	2.23	2.70	3.17
QTV-N	DC~18	50	1.3	4	0.05	N	1.58	1.88	2.18



**Examples:** One pair of VNA test cable assemblies, DC~50GHz, 0.6 meter, specify QTV-M2F-M2-0.6 and QTV-M2F-2F-0.6.



**Examples:** QT67 test cable assembly with armor, DC~60GHz, 1.85mm male to 1.85mm female, 0.5 meter, specify QT67P-60-VVF-0.5.

## Test Cable Series

Feature	Cables	Freq. (GHz)	Outer Diameter (mm)	Shielding Effectiveness (dB, Min.)	Phase Stability (±°, Max.)	Installation / Repeated Bend Radius (mm, Min.)	Armor	Bending / Mating Life Cycle	Connector Options	Temperature
										(°C)
High performance	QT110	DC~110	1.85	90	-	10 / 20	-	20k / 2k	1.0mm	-55~+125
	QT110P		3.84			30 / 50	Armored			
High performance	QT67	DC~67	2.4	90	7	12 / 24	-	20k / 5k	1.85mm, Mini-SMP, SMP	-55~+125
	QT67P		6			30 / 60	Armored			
<b>Hot</b> High performance	QT50	DC~50	3.6	90	7	18 / 36	-	100k / 5k	1.85mm, 2.4mm, 2.92mm, 3.5mm, SMA, N	-55~+125
	QT50P		6			30 / 60	Armored			
Ultra-flexible	QTF	DC~26.5	5.2	90	-	20.8 / 52	-	5k / 5k	SMA, N	-55~+85
Economical	QTE	DC~18	4	90	-	20 / 40	-	2k / 1k	SMA, N	-55~+125

## Attenuation & Power Handling

Attenuation*1 & Power Handling*2	Cables	1	3	6	10	12.4	18	26.5	40	50	67	110	Coefficient K
Attenuation (dB/100m)	QT110	114	199	283	368	412	500	612	760	857	1003	1314	K1=3.557846 K2=0.001220
Avg. Power (W)		102	58	41	31	28	23	19	15	13	11	8	
Attenuation (dB/100m)	QT67	64	112	161	210	236	288	355	445	503	594	-	K1=1.975832 K2=0.001221
Avg. Power (W)		97	54	38	29	25	21	17	14	12	10	-	
Attenuation (dB/100m)	<b>Hot</b> QT50	48.1	83.9	119.4	155.2	173.4	210.2	257.1	319.2	359.2	-	-	K1=1.507808 K2=0.000440
Avg. Power (W)		506	290	204	157	140	116	95	76	68	-	-	
Attenuation (dB/100m)	QTF	38.5	69.8	103.2	139.0	157.9	198.0	252.1	-	-	-	-	K1=1.136600 K2=0.002530
Avg. Power (W)		149	82	55	41	36	29	23	-	-	-	-	
Attenuation (dB/100m)	QTE	38.2	71.1	107.5	147.6	169.4	216.1	-	-	-	-	-	K1=1.082677 K2=0.003937
Avg. Power (W)		290	156	103	75	65	51	-	-	-	-	-	

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)



## Description

QA series high-performance cable, with low loss and high power features, has good temperature vs. phase stability (750 PPM@-55~+85°C, max.) up to 50GHz. It is suitable for avionics, phased-array radar, satellite communication and other fields.

## Features

- \* Low Insertion Loss
- \* High Phase Stability
- \* High Power
- \* Low PIM

## Construction



1	2	3	4	5
1	Inner Conductor	Silver plated copper (QA760 is Stranded silver-plated copper)		
2	Dielectric	Low density PTFE		
3	Inner Shield	Silver-plated copper tape		
4	Outer Shield	Silver-plated copper braid		
5	Jacket	PFA		

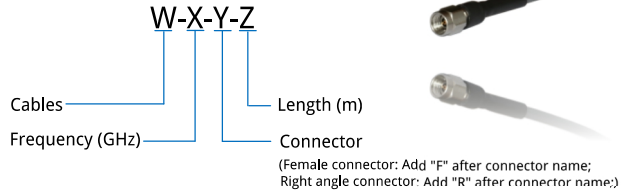
Cables	Dimensions (mm)					Connector Options
	Inner Conductor	Dielectric	Inner Shield	Outer Shield	Jacket	
QA150	0.30	0.88	1.00	1.23	1.50	2.92mm, SMA
<b>Hot</b> QA220	0.50	1.38	1.54	1.95	2.20	1.85mm, Mini-SMP, 2.4mm, 2.92mm, SSMA, SMP, 3.5mm, SMA
QA300	0.70	1.93	2.09	2.66	3.10	2.4mm, 2.92mm, 3.5mm, SMA, N
<b>Hot</b> QA360	0.91	2.50	2.66	3.11	3.60	2.4mm, 2.92mm, SSMA, 3.5mm, SMA, N
QA400	1.05	2.85	3.05	3.40	4.00	2.92mm
QA480	1.40	3.80	3.95	4.35	4.80	2.92mm, 3.5mm, SMA, N, TNC
<b>Hot</b> QA500	1.45	3.99	4.19	4.60	5.20	2.92mm, 3.5mm, SMA, N, TNC
QA550	1.60	4.30	4.50	5.10	5.60	SMA, N
QA750	2.10	5.70	5.95	6.60	7.40	SMA, N
QA760	2.39	6.25	6.49	7.06	7.65	SMA, N
<b>Hot</b> QA800	2.30	6.20	6.44	7.05	7.90	SMA, N, TNC, SC, 7/16 DIN (L29)
QA830	2.44	6.50	6.90	7.65	8.30	SMA, N

## Specifications

	QA150	QA220	QA300	QA360	QA400	QA480	QA500	QA550	QA750	QA760	QA800	QA830
Freq. (GHz)	40	50	50	40	40	26.5	26.5	18	18	18	18	18
Cut-off Freq. (GHz)	128	83	60	48	41	31	29	27	20	19	19	18
Impedance (Ω)	50											
Velocity of Propagation (%)	80	81	82	82	82	83	83	83	83	83	83	83
Shielding Effectiveness (dB)	> 90											
Voltage Withstand (V DC)	400	400	500	500	1500	1500	1500	2000	2500	2500	2500	2500
PIM (dBc)	-155											
Phase Stability (PPM@-55~+85°C)	< 1000	< 750										
Outer Diameter (mm)	1.50	2.20	3.10	3.60	4.00	4.80	5.20	5.60	7.40	7.65	7.9	8.30
Installation Bend Radius (mm)	8.0	8.8	15.0	18.0	20.0	24.0	26.0	28.0	37.0	38.0	39.0	41.0
Repeated Bend Radius (mm)	15.0	22.0	31.0	36.0	40.0	48.0	52.0	56.0	74.0	76.0	79.0	83.0
Weight (g/m)	5.4	16	29	33	40	58	67	93	125	137	130	162
Temperature (°C)	-55~+125			-55~+165								

## Connector Naming Rules

1 - 1.0mm (110GHz)	3 - 3.5mm (33GHz)
V - 1.85mm (67GHz)	S - SMA (26.5GHz)
G - Mini-SMP (mateable with GPPO & SSMP 65GHz)	N - N (18GHz)
2 - 2.4mm (50GHz)	T - TNC (18GHz)
K - 2.92mm (40GHz)	7 - 7/16 DIN (L29, 6GHz)
P - SMP (40GHz)	E - SC (6GHz)
A - SSMA (40GHz)	



**Examples:** QA220 cable assembly, DC-50GHz, 2.4mm male to 2.4mm female, 0.8 meter, specify QA220-50-22F-0.8.

Attenuation*1 & Power Handling*2	Cables	Freq.(G)										
		0.3	1	2	6	10	12.4	18	26.5	40	50	Coefficient K
Attenuation (dB/100m)	QA150	62.0	113.7	161.6	282.9	368	411.33	499.3	611.5	760.4	856.6	K1=3.557846
Avg. Power (W)		-	97	68	39	30	27	22	18	15	-	K2=0.001221
Attenuation (dB/100m)	<b>Hot</b> QA220	34.6	63.7	90.8	160.4	209.8	235.2	287.1	354	444	502.8	K1=1.975832
Avg. Power (W)		178	97	68	38	29	26	21	17	14	12	K2=0.001221
Attenuation (dB/100m)	QA300	25.5	46.8	66.6	117.1	152.6	170.8	207.9	255.4	318.9	360.1	K1=1.458470
Avg. Power (W)		749	407	286	163	125	111	92	75	60	53	K2=0.000680
Attenuation (dB/100m)	<b>Hot</b> QA360	20.4	37.5	53.4	93.9	122.4	137.018	166.7	204.8	255.7	-	K1=1.168470
Avg. Power (W)		936	509	358	203	156	139	115	93	75	-	K2=0.000550
Attenuation (dB/100m)	QA400	18.4	33.6	47.6	82.8	107.2	119.7	144.7	176.4	218.1	-	K1=1.054470
Avg. Power (W)		1159	634	447	257	198	178	147	120	97	-	K2=0.000180
Attenuation (dB/100m)	QA480	13.1	24.1	34.3	60.1	78.3	87.6	106.6	130.8	-	-	K1=0.750400
Avg. Power (W)		1689	919	644	368	282	252	207	169	-	-	K2=0.000328
Attenuation (dB/100m)	<b>Hot</b> QA500	12.8	23.5	33.3	58.6	76.3	85.4	103.9	127.6	-	-	K1=0.730000
Avg. Power (W)		1688	919	646	368	281	251	207	169	-	-	K2=0.000328
Attenuation (dB/100m)	QA550	12.2	22.3	31.6	55.0	71.2	79.5	96.1	-	-	-	K1=0.701472
Avg. Power (W)		1873	1024	722	415	320	287	237	-	-	-	K2=0.000110
Attenuation (dB/100m)	QA750	8.6	15.8	22.5	39.1	50.7	56.6	68.5	-	-	-	K1=0.496490
Avg. Power (W)		3186	1740	1223	704	542	486	401	-	-	-	K2=0.000104
Attenuation (dB/100m)	QA760	9.8	18	25.7	45.3	59.2	66.3	80.9	-	-	-	K1=0.559764
Avg. Power (W)		2952	1604	1126	638	488	436	357	-	-	-	K2=0.000320
Attenuation (dB/100m)	<b>Hot</b> QA800	8.0	14.8	21.1	37.3	48.9	54.8	67.0	-	-	-	K1=0.456300
Avg. Power (W)		3341	1812	1270	717	546	487	399	-	-	-	K2=0.000320
Attenuation (dB/100m)	QA830	7.2	13.3	18.9	33.6	44.1	49.5	60.6	-	-	-	K1=0.408997
Avg. Power (W)		3498	1894	1326	747	569	507	414	-	-	-	K2=0.000320

[1] VSWR:1.0 ; Ambient: +25°C (77°F); Raw cable

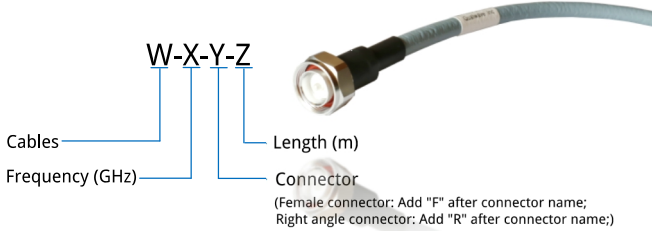
[2] VSWR:1.0 ; Ambient: +40°C (104°F); Sea level

Calculation Cable Attenuation: Attenuation (dB/100m) =  $K1 * \sqrt{F} \text{ (MHz)} + K2 * F \text{ (MHz)}$

Calculation Connector attenuation of single connector: Attenuation (dB) =  $0.03 * \sqrt{F} \text{ (GHz)}$

## Description

QB1200 & QB1500 have large outer diameter, low insertion loss, high power and bending durable features. They are used to all kinds of low loss and high power situation, such as phased-array radar, satellite communication, avionics, telecommunications, etc.



**Examples:** QB1200 cable assembly, DC-8GHz, N male to N female, 0.5 meter, specify QB1200-8-NNF-0.5.

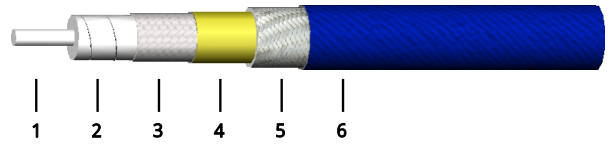
## Connector Naming Rules

N - N (18GHz)	7 - 7/16 DIN (L29, 6GHz)
E - SC (6GHz)	

## Features

- \* Low Insertion Loss
- \* Low PIM
- \* High Power

## Construction



1	Inner Conductor	Stranded silver-plated copper
2	Dielectric	Low density PTFE
3	Inner Shield	Silver-plated copper tape
4	Interlayer	Aluminum tape
5	Outer Shield	Silver-plated copper braid
6	Jacket	FEP

Cables	Dimensions (mm)						Connector Options
	Inner Conductor	Dielectric	Inner Shield	Interlayer	Outer Shield	Jacket	
QB1200	3.50	9.90	10.17	10.30	11.02	12.00	N, SC, 7/16 DIN(L29)
QB1500	4.40	12.50	12.82	12.95	13.67	14.70	N, 7/16 DIN(L29)

## Specifications

Cables	Freq. (GHz)	Cut-off Freq. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	PIM (dBc)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	Temperature (°C)
QB1200	8	11	50	76	> 90	3000	-155	12.00	60.0 / 120.0	310	-55~+200
QB1500	6	10				4000		14.70	76.0 / 150.0	400	

## Attenuation & Power Handling

Attenuation*1 & Power Handling*2	Cables	Freq. (G)	0.1	0.3	0.5	1	2	3	4	5	6	8	Coefficient K
			Attenuation (dB/100m)	QB1200	4.0	7.0	9.1	13.0	18.8	23.3	27.2	30.7	
Avg. Power (W)	8450	4830	3713		2590	1793	1447	1238	1098	991	844	K2=0.000600	
Attenuation (dB/100m)	QB1500	3.1	5.5	7.1	10.3	14.8	18.5	21.6	24.5	27.2	-	K1=0.304208	
Avg. Power (W)		13440	7650	5870	4080	2818	2260	1928	1703	1537	-	K2=0.000591	

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

$$\text{Calculation Cable Attenuation: Attenuation (dB/100m)} = K1 * \sqrt{F} (\text{MHz}) + K2 * F (\text{MHz})$$

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

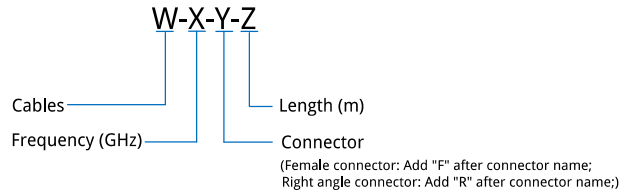
$$\text{Calculation Connector attenuation of single connector: Attenuation (dB)} = 0.03 * \sqrt{F} (\text{GHz})$$

## Description

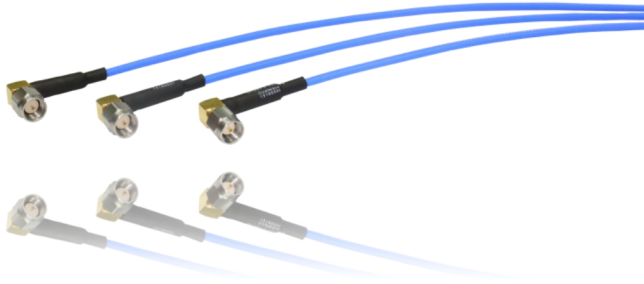
QG/QH series are both economical flexible cables. QG has low loss feature, otherwise, QH can replace semi-rigid cable, semi-flexible cable, and it is suitable for interconnection inside the equipment.

## Features

- \* Low Insertion Loss
- \* High Phase Stability
- \* High Power
- \* Low PIM



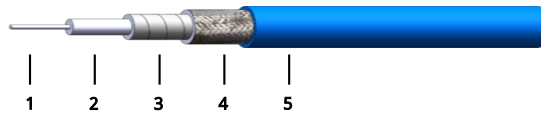
**Examples:** QH280 cable assembly, DC~18GHz, SMA male to SMA female, 0.5 meter, specify QH280-18-SSF-0.5.



## Connector Naming Rules

K - 2.92mm (40GHz)	N - N (18GHz)
P - SMP (40GHz)	T - TNC (18GHz)
A - SSMA (40GHz)	M - MCX (6GHz)
G - Mini-SMP (mateable with GPPO & SSMP, 40GHz)	X - MMCX (6GHz)
3 - 3.5mm (33GHz)	B - BNC (4GHz)
S - SMA (26.5GHz)	D - SMB (4GHz)
I - BMA (18GHz)	

## Construction



Cables	1: Inner Conductor	2: Dielectric	3: Inner Shield	4: Outer Shield	5: Jacket
QH160 / QH280 / QH400	Silver-plated copper	PTFE	Silver-plated copper tape	Silver-plated	FEP (QH160 is PFA)
QG360 / QG500 / QG800		Low density PTFE	Self-adhesive aluminum foil	copper braid	FEP

Cables	Dimensions (mm)					Connector Options
	1: Inner Conductor	2: Dielectric	3: Inner Shield	4: Outer Shield	5: Jacket	
QH160	0.30	0.95	1.10	1.35	1.60	Mini-SMP, SMP, SMA, MMCX, MCX
<b>Hot</b> QH280	0.53	1.63	1.83	2.18	2.65	2.92mm, SMP, SMA, Mini-SMP, BMA, N, MMCX, MCX, BNC, SMB
<b>Hot</b> QH400	0.94	3.00	3.20	3.55	4.00	2.92mm, SMP, SMA, BMA, N, MMCX, MCX, BNC, SMB
QG360	0.91	2.65	2.78	3.25	3.60	2.92mm, SSMA, 3.5mm, SMA, N
QG500	1.45	4.20	4.32	4.65	5.10	3.5mm, SMA, N, TNC
QG800	2.30	6.80	6.95	7.50	8.10	SMA, N, TNC

**Specifications**

	QH160	QH280	QH400	QG360	QG500	QG800
Freq. (GHz)	18	40	26.5	18	18	18
Cut-off Freq. (GHz)	110	62	34	40	28	19
Impedance (Ω)	50					
Velocity of Propagation (%)	70	70	70	76	76	76
Shielding Effectiveness (dB)	> 90	> 90	> 90	> 70	> 70	> 90
Voltage Withstand (V DC)	300	500	1500	1000	1500	2000
Outer Diameter (mm)	1.60	2.65	4.00	3.60	5.10	8.10
Installation Bend Radius (mm)	6.0	13.0	20.0	18.0	25.0	40.0
Repeated Bend Radius (mm)	16.0	26.0	40.0	36.0	51.0	81.0
Weight (g/m)	5	22	49	28	60	120
Temperature (°C)	-55--+125					

**Attenuation & Power Handling**

Attenuation*1 & Power Handling*2	Cables	Freq. (G)												Coefficient K
		0.3	0.5	1	2	6	8	10	12.4	18	26.5	40		
Attenuation (dB/100m)	QH160	73.8	95.4	135.2	191.7	334.0	386.6	433.0	483.2	584.7	-	-	K1=4.248276 K2=0.000820	
Avg. Power (W)		150	116	82	57	33	28	26	23	19	-	-		
Attenuation (dB/100m)	<b>Hot</b> QH280	37.0	48.2	69.3	100.4	183.7	216.4	246.1	279.0	348.2	440.8	570.9	K1=2.066929 K2=0.003937	
Avg. Power (W)		187	171	119	82	45	38	33	30	24	19	14		
Attenuation (dB/100m)	<b>Hot</b> QH400	19.9	26.2	38.2	56.3	107.5	128.3	147.6	169.4	216.1	280.6	-	K1=1.082677 K2=0.003937	
Avg. Power (W)		512	423	290	196	103	86	75	65	51	39	-		
Attenuation (dB/100m)	QG360	21.0	27.2	38.7	55.1	96.9	112.5	126.4	141.5	172.3	-	-	K1=1.204032 K2=0.000600	
Avg. Power (W)		850	657	462	325	185	159	141	126	104	-	-		
Attenuation (dB/100m)	QG500	12.8	16.6	23.8	34.3	62.1	73.0	82.7	93.4	115.9	-	-	K1=0.718000 K2=0.001088	
Avg. Power (W)		1428	1098	766	530	293	249	220	195	157	-	-		
Attenuation (dB/100m)	QG800	8.0	10.5	15.1	21.9	40.1	47.3	53.8	61.0	76.3	-	-	K1=0.448000 K2=0.000898	
Avg. Power (W)		3141	2409	1674	1152	629	533	469	413	331	-	-		

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)



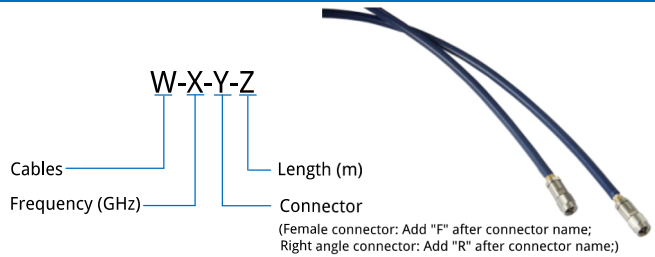
## Description

QZ series is ultra flexible RF cable, suitable for phased-array radar, laboratory test and small & complicated interconnection occasions.

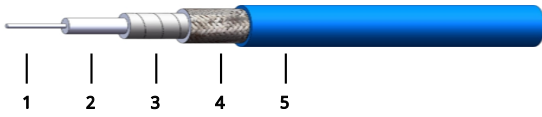
## Features

\* Ultra Flexibile

\* Corrosion Resistance



## Construction



1	Inner Conductor	Stranded Silver-plated copper
2	Dielectric	Low density PTFE
3	Inner Shield	Silver-plated copper tape
4	Outer Shield	Silver-plated copper braid
5	Jacket	PUR

**Examples:** QZ360 cable assembly, DC~18GHz, SMA male to SMA female, 0.5 meter, specify QZ360-18-SSF-0.5.

## Connector Naming Rules

K - 2.92mm (40GHz)	S - SMA (26.5GHz)
A - SSMA (40GHz)	N - N (18GHz)
3 - 3.5mm (33GHz)	T - TNC (18GHz)

Cables	Dimensions (mm)					Connector Options
	1: Inner Conductor	2: Dielectric	3: Inner Shield	4: Outer Shield	5: Jacket	
QZ360	0.72	2.05	2.22	2.66	3.60	2.92mm, SSMA, 3.5mm, SMA, N
QZ500	1.02	3.00	3.20	3.78	5.00	3.5mm, SMA, N
QZ600	1.44	4.25	4.45	4.90	5.90	SMA, N
QZ800	1.88	5.50	5.74	6.31	8.00	SMA, N, TNC

## Specifications

Cables	Freq. (GHz)	Cut-off Freq. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	Temperature (°C)
QZ360	40	51	50	76	> 90	500	3.60	18.0 / 36.0	30	-55~+85
QZ500	26.5	35				1000	5.00	25.0 / 50.0	50	
QZ600	26.5	29.5				1700	5.90	30.0 / 60.0	82	
QZ800	18	20				1700	8.00	40.0 / 80.0	130	

## Attenuation & Power Handling

Attenuation*1 & Power Handling*2	Freq. (G) Cables	0.3	0.5	1	2	6	8	10	12.4	18	26.5	40	Coefficient K
		Attenuation (dB/100m)	QZ360	28.0	36.3	51.9	74.5	133.4	156.1	176.4	198.7	244.9	
Avg. Power (W)	220	169		119	82	46	39	35	31	25	20	16	K2=0.001806
Attenuation (dB/100m)	QZ500	20.4	26.7	38.5	55.6	103.2	122.0	139.0	157.9	198.0	252.1	-	K1=1.136600
Avg. Power (W)		280	215	149	102	55	46	41	36	29	23	-	K2=0.002530
Attenuation (dB/100m)	QZ600	15.6	20.2	28.7	41.2	73.6	86.0	97.1	109.2	134.3	167.2	-	K1=0.880600
Avg. Power (W)		321	248	175	122	68	59	52	46	37	30	-	K2=0.000900
Attenuation (dB/100m)	QZ800	9.5	12.5	18.2	26.8	50.9	60.7	69.8	80.0	101.9	-	-	K1=0.517315
Avg. Power (W)		626	477	327	222	117	98	85	74	58	-	-	K2=0.001806

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

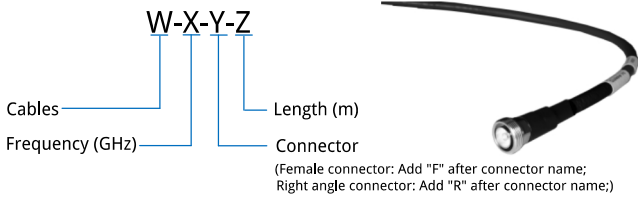
Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)

## Description

QY is low loss flexible cable, suitable for outdoor, such as wireless base station, satellite communication, maritime communication.



**Examples:** QY1000 cable assembly, DC~10GHz, N male to N female, 1.5 meters, specify QY1000-10-NNF-1.5.

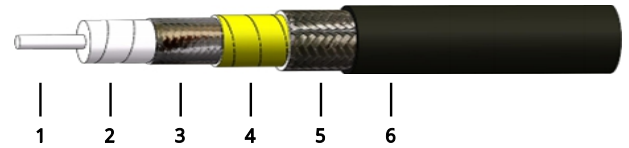
## Connector Naming Rules

S - SMA (26.5GHz)	T - TNC (18GHz)
N - N (18GHz)	

## Features

- \* Low Insertion Loss
- \* High Weatherability
- \* UV resistant

## Construction



1	Inner Conductor	Silver-plated copper
2	Dielectric	Low density PTFE
3	Inner Shield	Silver-plated copper tape
4	Interlayer	Aluminum tape
5	Outer Shield	Silver-plated copper braid
6	Jacket	PUR

Cables	Dimensions (mm)						Connector Options
	1: Inner Conductor	2: Dielectric	3: Inner Shield	4: Interlayer	5: Outer Shield	6: Jacket	
QY460	1.02	3.07	3.27	3.43	3.94	5.00	SMA, N, TNC
QY520	1.29	3.91	4.15	4.28	4.79	6.00	SMA, N
QY635	1.57	4.72	4.96	5.10	5.66	7.20	SMA, N, TNC
QY1000	2.44	7.24	7.48	7.61	8.19	10.15	N

## Specifications

Cables	Freq. (GHz)	Cut-off Freq. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	Temperature (°C)	Outdoor Life (year)
QY460	18	35	50	76	> 70	1000	5.00	25.0 / 50.0	56	-55~+85	20
QY520	18	35				1000	6.00	30.0 / 60.0	70		
QY635	18	27				2000	7.20	36.0 / 72.0	89		
QY1000	10	15				3000	10.15	50.0 / 100.0	190		

## Attenuation & Power Handling

Attenuation*1 & Power Handling*2	Cables	Freq. (G)										Coefficient K
		0.1	0.3	0.5	1	3	6	8	10	12.4	18	
Attenuation (dB/100m)	QY460	11.1	19.2	24.9	35.4	62.0	88.8	103.2	116.0	129.9	158.3	K1=1.099485 K2=0.000602
Avg. Power (W)		636	366	283	199	113	79	68	61	54	44	
Attenuation (dB/100m)	QY520	8.6	15.0	19.4	27.7	48.7	69.9	81.4	91.5	102.7	125.5	K1=0.856234 K2=0.000591
Avg. Power (W)		843	484	374	263	149	104	88	79	71	58	
Attenuation (dB/100m)	QY635	6.9	12.0	15.6	22.2	39.2	56.4	65.8	74.2	83.4	102.2	K1=0.682743 K2=0.000591
Avg. Power (W)		1150	660	509	357	202	140	120	107	95	77	
Attenuation (dB/100m)	QY1000	4.5	7.9	10.3	14.7	26.2	38.2	44.7	50.6	-	-	K1=0.446080 K2=0.000600
Avg. Power (W)		3590	2053	1580	1104	619	425	363	321	-	-	

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)

## Description

QR wireless communication cable, with low loss and low cost, is mainly used in communication field, and also can be used for microwave product interconnection.

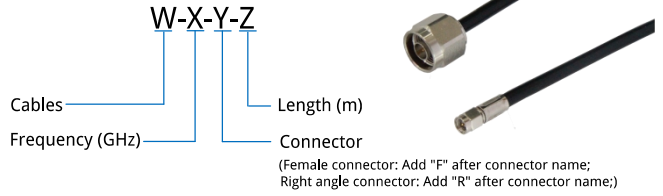
## Connector Naming Rules

S - SMA (6GHz)	7 - 7/16 DIN (L29, 6GHz)
T - TNC (6GHz)	B - BNC (4GHz)
N - N (6GHz)	

## Features

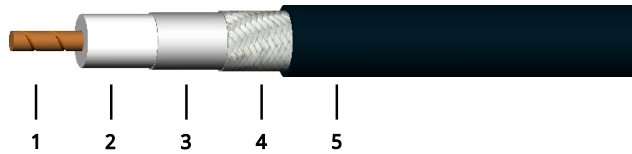
- \* Low Insertion Loss
- \* High Weatherability

\*UV resistant



**Examples:** QR600 cable assembly, DC~5.8GHz, SMA male to SMA female, 1.5 meters, specify QR600-5.8-SSF-1.5.

## Construction



Cables	1: Inner Conductor	2: Dielectric	3: Outer Conductor	4: Outer Shield	5: Jacket
QR600	Copper	Foamed PE	Double-edged aluminum foil	Tin-plated copper braid	PE or PVC
QR1000 / QR1500	Copper-clad aluminum	Foamed PE			PE or PVC
QR600U / QR1000U / QR1500U	Stranded copper	Foamed PE			TPE

Cables	Dimensions (mm)					Connector Options
	1: Inner Conductor	2: Dielectric	3: Outer Conductor	4: Outer Shield	5: Jacket	
<b>Hot</b> QR600	1.42	3.81	3.94	4.52	6.00	SMA, N, BNC
QR600U	1.42	3.81	3.94	4.52	6.00	SMA, N, BNC
<b>Hot</b> QR1000	2.74	7.24	7.39	8.13	10.00	SMA, N, TNC
QR1000U	2.74	7.24	7.39	8.13	10.30	SMA, N, TNC
QR1500	4.47	11.56	11.72	12.45	15.00	N, 7/16 DIN(L29)
QR1500U	4.47	11.56	11.71	12.45	15.00	N, 7/16 DIN(L29)

## Specifications

	QR600	QR600U	QR1000	QR1000U	QR1500	QR1500U
Freq. (GHz)	5.8	5.8	5.8	2	5.8	2
Cut-off Freq. (GHz)	30	31	16.2	16.2	10.3	10
Impedance (Ω)	50					
Velocity of Propagation (%)	83	84	84	85	87	87
Shielding Effectiveness (dB)	> 90					
Voltage Withstand (V DC)	1500	1500	2500	2500	4000	4000
Outer Diameter (mm)	6.00	6.00	10.00	10.30	15.00	15.00
Installation Bend Radius (mm)	20.0	20.0	25.0	25.0	38.0	40.0
Repeated Bend Radius (mm)	65.0	65.0	100.0	100.0	152.0	80.0
Weight (g/m)	50	50	100	130	200	250
Temperature (°C)	-40~+85					
Outdoor Life (year)	20 or 10	20	20 or 10	20	20 or 10	20

## Attenuation & Power Handling (The attenuation in this table is typical value, and the maximum value is 1.1 times of the typical value.)

Attenuation*1 & Power Handling*2	Cables	Freq. (G)											Coefficient K
		0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2	2.5	5.8	
Attenuation (dB/100m)	<b>Hot</b> QR600	4.4	5.7	10.0	12.2	17.5	25.1	32.8	36.1	38.1	42.9	67.5	K1=0.8038058
Avg. Power (W)		1490	1150	660	540	380	260	200	180	170	150	100	
Attenuation (dB/100m)	QR600U	5.3	6.9	12.1	14.6	21.1	30.2	39.5	43.4	45.9	51.7	81.3	K1=0.9678478
Avg. Power (W)		1240	960	550	450	310	220	170	150	140	130	80	
Attenuation (dB/100m)	<b>Hot</b> QR1000	2.2	2.9	5.1	6.2	8.9	12.8	16.9	18.6	19.7	22.3	35.6	K1=0.4022310
Avg. Power (W)		3330	2570	1470	1200	830	580	440	400	370	330	210	
Attenuation (dB/100m)	QR1000U	2.7	3.5	6.1	7.4	10.7	15.4	20.3	22.4	23.7	-	-	K1=0.4822835
Avg. Power (W)		2770	2140	1220	1000	690	480	360	330	310	-	-	
Attenuation (dB/100m)	QR1500	1.4	1.8	3.2	3.9	5.7	8.4	11.1	12.3	13.0	14.8	24.2	K1=0.2526247
Avg. Power (W)		5510	4240	2410	1970	1350	930	700	630	590	520	320	
Attenuation (dB/100m)	QR1500U	1.7	2.2	3.8	4.6	6.8	9.8	13.1	14.5	15.4	-	-	K1=0.2974409
Avg. Power (W)		4590	3540	2010	1640	1130	770	580	530	500	-	-	

[1] VSWR:1.0 ; Ambient: +25°C (77°F); Raw cable

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0 ; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)

## Description

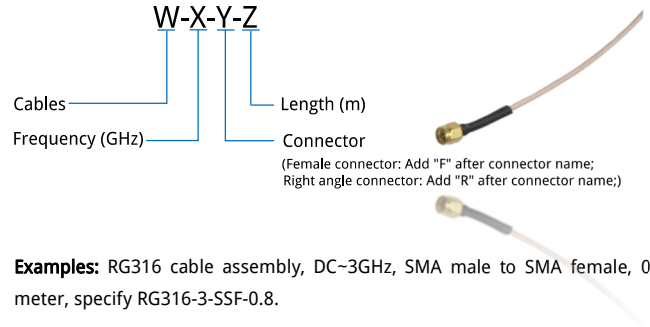
RG cable is a kind of low cost cable, which is mainly used for the interconnection of microwave equipments.

## Features

\* Low Cost

## Connector Naming Rules

S - SMA (12.4GHz)	X - MMCX (6GHz)
N - N (12.4GHz)	M - MCX (6GHz)
T - TNC (12.4GHz)	B - BNC (4GHz)
I - BMA (12.4GHz)	D - SMB (4GHz)



## Specifications

Cables	RG142	RG223	RG316	
Construction				
Freq. (GHz)	12.4	6	6	
Cut-off Freq. (GHz)	-	12.4	-	
Impedance (Ω)	50	50	50	
Velocity of Propagation (%)	70	66	70	
Operating Voltage (V DC)	1400	1400	600	
Capacitance (pF/m)	95	100	96	
Material and Dimensions (mm)	1: Inner Conductor	Silver-plated copper / 0.93 mm	Silver-plated copper / 0.9 mm	Stranded Silver-plated copper / 0.51 mm
	2: Dielectric	PTFE / 2.98 mm	PE / 2.95 mm	FEP / 1.5 mm
	3: Inner Shield	Silver-plated copper braid / 3.45 mm	Silver-plated copper braid / 96*0.12 mm	-
	4: Outer Shield	Silver-plated copper braid / 3.95 mm	Silver-plated copper braid / 112*0.12 mm	Silver-plated copper braid / 1.95 mm (Corresponding to the 3rd layer of the structure diagram)
	5: Jacket	FEP / 4.95 mm	PVC / 5.4 mm	FEP / 2.5 mm (Corresponding to the 4th layer of the structure diagram)
Installation / Repeated Bend Radius (mm)	25.0 / 50.0	25.0 / 25.0	-	
Connector Options	SMA, N, TNC, BNC	SMA, MMCX, MCX, BNC, SMB	SMA, MMCX, MCX, BNC, SMB, BMA	
Temperature (°C)	-55~+200	-20~+80	-55~+200	

## Attenuation

Attenuation (dB/100m)	Freq. (G)	Cables												Coefficient K
		0.05	0.1	0.2	0.4	0.5	0.9	1	2	3	5	6	12.4	
RG142		-	12.5	-	25.6	-	-	42	-	78.1	105	118.5	226.7	-
RG223		14	16	19	28	37	44	-	70	88	-	145	-	-
RG316		18.5	26.2	37.4	53.2	59.8	81.1	85.6	123.4	153.2	-	295	-	K1=2.583794 K2= 0.003893

[1] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

$$\text{Calculation Cable Attenuation: Attenuation (dB/100m)} = K1 * \sqrt{F \text{ (MHz)}} + K2 * F \text{ (MHz)}$$

$$\text{Calculation Connector attenuation of single connector: Attenuation (dB)} = 0.03 * \sqrt{F \text{ (GHz)}}$$



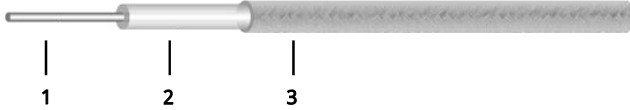
## Description

QD series is a kind of semi-flexible RF cable, whose shape could be formed manually. It is easy to assembly and often used for equipment interconnection.

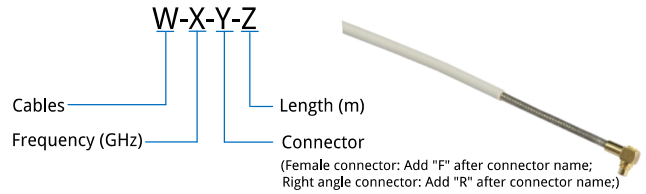
## Features

- \* Hand Formable
- \* Quick and Easy Assembly

## Construction



1	Inner Conductor	Silver-plated copper
2	Dielectric	PTFE
3	Inner Shield	Tin-plated copper braid



**Examples:** QD141 cable assembly, DC~4GHz, SMA male to SMA female, 0.5 meter, specify QD141-4-SSF-0.5.

## Connector Naming Rules

K - 2.92mm (40GHz)	N - N (18GHz)
P - SMP (26.5GHz)	T - TNC (18GHz)
A - SSMA (26.5GHz)	M - MCX (6GHz)
3 - 3.5mm (26.5GHz)	X - MMCX (6GHz)
S - SMA (26.5GHz)	B - BNC (4GHz)
G - Mini-SMP (mateable with GPPO & SSMP, 18GHz)	D - SMB (4GHz)
I - BMA (18GHz)	

Cables	Dimensions (mm)			Connector Options
	Inner Conductor	Dielectric	Inner Shield	
<b>Hot</b> QD086	0.53	1.65	2.17	2.92mm, SMP, SSMA, SMA, Mini-SMP, BMA, N, MMCX, MCX, BNC, SMB
<b>Hot</b> QD141	0.94	2.98	3.55	3.5mm, SMP, SSMA, SMA, BMA, N, MMCX, MCX, BNC, SMB
QD250	1.65	5.25	6.30	SMA, N

## Specifications

Cables	Freq. (GHz)	Cut-off Freq. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation / Repeated Bend Radius (mm)	Weight (g/m)	Temperature (°C)
QD086	40	61	50	70	> 100	1000	2.17	10.0 / 20.0	20	-55~+150
QD141	6	34.4				1500	3.55	17.75 / 35.5	50	-55~+150
QD250	6	19				2500	6.30	20.0 / 40.0	140	-55~+225

## Attenuation and Power Handling

Attenuation*1 & Power Handling*2	Cables	Freq. (G)	Freq. (G)											Coefficient K
			0.3	0.5	1	2	6	8	10	12.4	18	26.5	40	
Attenuation (dB/100m)	<b>Hot</b> QD086	QD086	38.2	49.8	71.9	104.6	193.8	229.1	261.4	297.4	373.6	476.6	622.6	K1=2.115000 K2=0.004990
Avg. Power (W)			135	103	72	49	27	22	20	17	14	11	8	
Attenuation (dB/100m)	<b>Hot</b> QD141	QD141	20.6	27.0	39.4	58.1	110.7	-	-	-	-	-	-	K1=1.119870 K2=0.003986
Avg. Power (W)			311	237	163	110	58	-	-	-	-	-	-	
Attenuation (dB/100m)	QD250	QD250	12.1	16.03	23.60	35.23	69.09	-	-	-	-	-	-	K1=0.645600 K2=0.003180
Avg. Power (W)			713	540	367	246	125	-	-	-	-	-	-	

[1] VSWR:1.0 ; Ambient: +25°C (77°F); Raw cable

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0 ; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB) = 0.03 \* √F (GHz)

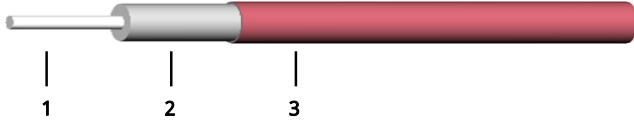
## Description

QE series semi-rigid RF cable with low PIM, is used for internal connection of precision instruments.

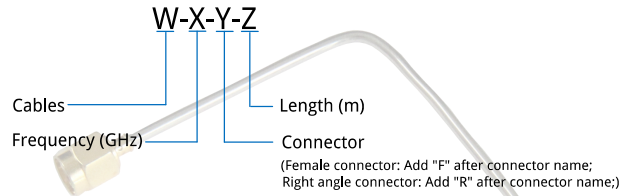
## Features

\* Low PIM

## Construction



1	Inner Conductor	Silver-plated copper
2	Dielectric	PTFE
3	Outer Shield	Ternary alloy plated seamless copper tube



**Examples:** QE086 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QE086-18-SSF-0.5.

## Connector Naming Rules

2 - 2.4mm (40GHz)	I - BMA (18GHz)
K - 2.92mm (40GHz)	N - N (18GHz)
P - SMP (26.5GHz)	T - TNC (18GHz)
A - SSMA (26.5GHz)	M - MCX (6GHz)
3 - 3.5mm (26.5GHz)	X - MMCX (6GHz)
S - SMA (26.5GHz)	B - BNC (4GHz)
G - Mini-SMP (mateable with GPPO & SSMP, 18GHz)	D - SMB (4GHz)

Cables	Dimensions (mm)			Connector Options
	Inner Conductor	Dielectric	Outer Conductor	
QE020	0.127	0.432	0.580	2.92mm, SMP, Mini-SMP, SMA
QE047	0.28	0.92	1.20	2.92mm, SMP, Mini-SMP, SMA
QE086	0.53	1.68	2.18	2.4mm, 2.92mm, SMP, SSMA, SMA, Mini-SMP, BMA, N, MMCX, MCX, BNC, SMB
QE141	0.94	2.98	3.58	3.5mm, SMP, SSMA, SMA, BMA, N, MMCX, MCX, BNC, SMB

## Specifications

Cables	Freq. (GHz)	Cut-off Freq. (GHz)	Impedance (Ω)	Velocity of Propagation (%)	Shielding Effectiveness (dB)	Voltage Withstand (V DC)	Outer Diameter (mm)	Installation Bend Radius (mm)	Weight (g/m)	Temperature (°C)
QE020	40	110	50	70	> 165	100	0.580	1.27	2	-55~+125
QE047	40	110				100	1.20	4.2	3	
QE086	40	64				400	2.18	7	19	
QE141	26.5	34				500	3.58	15	46	

## Attenuation & Power Handling

Attenuation*1 & Power Handling*2	Cables	Freq. (G)									
		0.3	0.5	1	6	10	12.4	18	26.5	40	Coefficient K
Attenuation (dB/100m)	QE020	130	170	240	600	780	870	1060	1300	1620	K1=7.5016 K2=0.0029
Avg. Power (W)		99	77	54	22	17	15	12	10	8	
Attenuation (dB/100m)	QE047	60	80	114	290	380	430	520	650	820	K1=3.5016 K2=0.0029
Avg. Power (W)		109	84	59	23	18	16	13	10	8	
Attenuation (dB/100m)	QE086	35.0	45.5	64.9	166.6	219.9	247.6	304.9	379.9	482.7	K1=1.985320 K2=0.002140
Avg. Power (W)		475	366	256	100	76	67	55	44	34	
Attenuation (dB/100m)	QE141	20.3	26.5	38.2	102.4	137.7	156.4	195.9	249.2	-	K1=1.131702 K2=0.002450
Avg. Power (W)		1020	782	542	203	151	133	106	83	-	

[1] VSWR:1.0; Ambient: +25°C (77°F);

Calculation Cable Attenuation: Attenuation (dB/100m) = K1 \* √F (MHz) + K2 \* F (MHz)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculation Connector attenuation of single connector: Attenuation (dB)= 0.03 \* √F (GHz)

## Description

Coaxial adapter is widely used when the two connectors do not match each other. It features wide frequency band, high performance, high reliability and long life cycle.

**Features:** DC~110GHz, Low VSWR, High Durable & Reliable.

**Applications:** Laboratory Test, Radar, Instrumentation etc.

## Coaxial Adapters



Part Number	Freq. (GHz)	VSWR	Description	Temperature(°C)
QA11-MM	DC~110	1.35	1.0mm (m) to 1.0mm (m)	-55~+85
QA11-FF			1.0mm (f) to 1.0mm (f)	
QA11-MF			1.0mm (m) to 1.0mm (f)	
QA1V-MM	DC~67	1.3	1.0mm (m) to 1.85mm (m)	-55~+165
QA1V-MF			1.0mm (m) to 1.85mm (f)	
QA1V-FF			1.0mm (f) to 1.85mm (f)	
QA1V-FM			1.0mm (f) to 1.85mm (m)	
QAVV-MM	DC~67	1.25	1.85mm (m) to 1.85mm (m)	-55~+125
QAVV-MF			1.85mm (m) to 1.85mm (f)	
QAVV-FF			1.85mm (f) to 1.85mm (f)	
QAVG-MM	DC~67	1.3	1.85mm (m) to SSMP (m)	-55~+125
QAVG-FF			1.85mm (f) to SSMP (f)	
QAV2-MM	DC~50	1.2	1.85mm (m) to 2.4mm (m)	-55~+125
QAV2-MF			1.85mm (m) to 2.4mm (f)	
QAV2-FM			1.85mm (f) to 2.4mm (m)	
QAV2-FF			1.85mm (f) to 2.4mm (f)	
QA22-MM	DC~50	1.25	2.4mm (m) to 2.4mm (m)	-60~+165
QA22-MF			2.4mm (m) to 2.4mm (f)	
QA22-FF			2.4mm (f) to 2.4mm (f)	
QAVK-MM	DC~40	1.15	1.85mm (m) to 2.92mm (m)	-55~+165
QAVK-MF			1.85mm (m) to 2.92mm (f)	
QAVK-FM			1.85mm (f) to 2.92mm (m)	
QAVK-FF			1.85mm (f) to 2.92mm (f)	
QAG2-MM	DC~40	1.22	SSMP (m) to 2.4mm (m)	-55~+165
QAG2-MF			SSMP (m) to 2.4mm (f)	
QAG2-FM			SSMP (f) to 2.4mm (m)	
QAG2-FF			SSMP (f) to 2.4mm (f)	
QAGK-MM	DC~40	1.2	SSMP (m) to 2.92mm (m)	-60~+165
QAGK-MF			SSMP (m) to 2.92mm (f)	
QAGK-FM			SSMP (f) to 2.92mm (m)	
QAGK-FF			SSMP (f) to 2.92mm (f)	

Part Number	Freq. (GHz)	VSWR	Description	Temperature(°C)
QA2K-MM			2.4mm (m) to 2.92mm (m)	
QA2K-MF	DC~40	1.25	2.4mm (m) to 2.92mm (f)	-60~+165
QA2K-FM			2.4mm (f) to 2.92mm (m)	
QA2K-FF			2.4mm (f) to 2.92mm (f)	
QA2P-MM			2.4mm (m) to SMP (m)	
QA2P-MF	DC~40	1.5	2.4mm (m) to SMP (f)	-50~+85
QA2P-FM			2.4mm (f) to SMP (m)	
QA2P-FF			2.4mm (f) to SMP (f)	
QAKP-MM			2.92mm (m) to SMP (m)	
QAKP-MF	DC~40	1.25	2.92mm (m) to SMP (f)	-60~+165
QAKP-FM			2.92mm (f) to SMP (m)	
QAKP-FF			2.92mm (f) to SMP (f)	
QAKK-MM			2.92mm (m) to 2.92mm (m)	
QAKK-MF	DC~40	1.25	2.92mm (m) to 2.92mm (f)	-60~+165
QAKK-FF			2.92mm (f) to 2.92mm (f)	
QAV3-MM			1.85mm (m) to 3.5mm (m)	
QAV3-MF	DC~33	1.15	1.85mm (m) to 3.5mm (f)	-55~+125
QAV3-FM			1.85mm (f) to 3.5mm (m)	
QAV3-FF			1.85mm (f) to 3.5mm (f)	
QA23-MM			2.4mm (m) to 3.5mm (m)	
QA23-MF	DC~33	1.15	2.4mm (m) to 3.5mm (f)	-60~+165
QA23-FM			2.4mm (f) to 3.5mm (m)	
QA23-FF			2.4mm (f) to 3.5mm (f)	
QAK3-MM			2.92mm (m) to 3.5mm (m)	
QAK3-MF	DC~33	1.18	2.92mm (m) to 3.5mm (f)	-55~+165
QAK3-FM			2.92mm (f) to 3.5mm (m)	
QAK3-FF			2.92mm (f) to 3.5mm (f)	
QA33-MM			3.5mm (m) to 3.5mm (m)	
QA33-MF	DC~33	1.15	3.5mm (m) to 3.5mm (f)	-55~+125
QA33-FF			3.5mm (f) to 3.5mm (f)	
QAGS-FM			SSMP (f) to SMA (m)	
QAGS-MM	DC~26.5	1.3	SSMP (m) to SMA (m)	-55~+125
QAGS-FF			SSMP (f) to SMA (f)	
QAGS-MF			SSMP (m) to SMA (f)	
QAAA-MM			SSMA (m) to SSMA (m)	
QAAA-FF	DC~26.5	1.2	SSMA (f) to SSMA (f)	-55~+165
QAPS-MM			SMP (m) to SMA (m)	
QAPS-MF	DC~26.5	1.25	SMP (m) to SMA (f)	-55~+85
QAPS-FM			SSMP (f) to SMA (m)	
QAPS-FF			SMP (f) to SMA (f)	
QAAS-MM			SSMA (m) to SMA (m)	
QAAS-MF	DC~26.5	1.3	SSMA (m) to SMA (f)	-55~+85
QAAS-FM			SSMA (f) to SMA (m)	
QAAS-FF			SSMA (f) to SMA (f)	

Part Number	Freq. (GHz)	VSWR	Description	Temperature(°C)
QASS-MM			SMA (m) to SMA (m)	
QASS-MF	DC~26.5	1.3	SMA (m) to SMA (f)	-55~+85
QASS-FF			SMA (f) to SMA (f)	
QASS-MM-A			SMA (m) to SMA (m)	
QASS-MF-A	DC~26.5	1.2	SMA (m) to SMA (f)	-55~+85
QASS-FF-A			SMA (f) to SMA (f)	
QASS-MM-B			SMA (m) to SMA (m) ,brass	
QASS-MF-B	DC~26.5	1.2	SMA (m) to SMA (f) ,brass	-55~+85
QASS-FF-B			SMA (f) to SMA (f) ,brass	
QA2N-MM			2.4mm (m) to N (m)	
QA2N-MF	DC~18	1.15	2.4mm (m) to N (f)	-60~+165
QA2N-FM			2.4mm (f) to N (m)	
QA2N-FF			2.4mm (f) to N (f)	
QAKN-MM			2.92mm (m) to N (m)	
QAKN-MF	DC~18	1.15	2.92mm (m) to N (f)	-55~+125
QAKN-FM			2.92mm (f) to N (m)	
QAKN-FF			2.92mm (f) to N (f)	
QA3N-MM			3.5mm (m) to N (m)	
QA3N-MF	DC~18	1.2	3.5mm (m) to N (f)	-55~+165
QA3N-FM			3.5mm (f) to N (m)	
QA3N-FF			3.5mm (f) to N (f)	
QASN-MM			SMA (m) to N (m)	
QASN-MF	DC~18	1.15	SMA (m) to N (f)	-50~+85
QASN-FM			SMA (f) to N (m)	
QASN-FF			SMA (f) to N (f)	
QASN-MM-B			SMA (m) to N (m), Nickel plated brass	
QASN-MF-B	DC~18	1.20	SMA (m) to N (f), Nickel plated brass	-50~+85
QASN-FM-B			SMA (f) to N (m), Nickel plated brass	
QASN-FF-B			SMA (f) to N (f), Nickel plated brass	
QAST-MM			SMA (m) to TNC (m)	
QAST-MF	DC~18	1.25	SMA (m) to TNC (f)	-50~+85
QAST-FM			SMA (f) to TNC (m)	
QAST-FF			SMA (f) to TNC (f)	
QASQ-MM			SMA (m) to QMA (m)	
QASQ-MF	DC~18	1.25	SMA (m) to QMA (f)	-55~+165
QASQ-FM			SMA (f) to QMA (m)	
QASQ-FF			SMA (f) to QMA (f)	
QASI-FM			SMA (f) to BMA (m)	
QASI-FF	DC~18	1.25	SMA (f) to BMA (f)	-55~+85
QASI-MF			SMA (m) to BMA (f)	
QASI-MM			SMA (m) to BMA (m)	
QANN-MM			N (m) to N (m)	
QANN-MF	DC~18	1.15	N (m) to N (f)	-55~+85
QANN-FF			N (f) to N (f)	



Part Number	Freq. (GHz)	VSWR	Description	Temperature(°C)
QATT-MM			TNC (m) to TNC (m)	
QATT-MF	DC~18	1.25	TNC (m) to TNC (f)	-50~+85
QATT-FF			TNC (f) to TNC (f)	
QANJ-F	DC~18	1.15	N (f) to 7.0mm	-55~+125
QANJ-M			N (m) to 7.0mm	
QATN-MM			TNC (m) to N (m)	
QATN-MF	DC~18	1.3	TNC (m) to N (f)	-55~+165
QATN-FM			TNC (f) to N (m)	
QATN-FF			TNC (f) to N (f)	
QANE-MM			N (m) to SC (m)	
QANE-MF	DC~8	1.15	N (m) to SC (f)	-55~+165
QANE-FM			N (f) to SC (m)	
QANE-FF			N (f) to SC (f)	
QAN7-MM			N (m) to 7/16 DIN (m)	
QAN7-MF	DC~7.5	1.1	N (m) to 7/16 DIN (f)	-40~+85
QAN7-FM			N (f) to 7/16 DIN (m)	
QAN7-FF			N (f) to 7/16 DIN (f)	
QASB-MM-B			SMA (m) to BNC (m), Nickel plated brass	
QASB-FM-B	DC~6	1.35	SMA (f) to BNC (m), Nickel plated brass	-55~+155
QASB-MF-B			SMA (m) to BNC (f), Nickel plated brass	
QASB-FF-B			SMA (f) to BNC (f), Nickel plated brass	
QASD-FM	DC~6	1.35	SMA (f) to SMB (m)	-55~+125
QASD-FF			SMA (f) to SMB (f)	
QASQ-MM-B			SMA (m) to QMA (m)	
QASQ-MF-B	DC~6	1.25	SMA (m) to QMA (f)	-40~+85
QASQ-FM-B			SMA (f) to QMA (m)	
QASQ-FF-B			SMA (f) to QMA (f)	
QASX-F	DC~6	1.25	SMA (f) to MMCX (f)	-55~+155
QAN7-MM			N (m) to 7/16 DIN (m)	
QAN7-MF	DC~6	1.25	N (m) to 7/16 DIN (f)	-55~+125
QAN7-FM			N (f) to 7/16 DIN (m)	
QAN7-FF			N (f) to 7/16 DIN (f)	
QANB-MM			N (m) to BNC (m)	
QANB-MF	DC~6	1.2	N (m) to BNC (f)	-55~+85
QANB-FM			N (f) to BNC (m)	
QANB-FF			N (f) to BNC (f)	
QANB-MM-B			N (m) to BNC (m)	
QANB-MF-B	DC~6	1.35	N (m) to BNC (f)	-55~+155
QANB-FM-B			N (f) to BNC (m)	
QANB-FF-B			N (f) to BNC (f)	
QAEE-MM			SC (m) to SC (m)	
QAEE-MF	DC~6	1.25	SC (m) to SC (f)	-55~+85
QAEE-FF			SC (f) to SC (f)	

Part Number	Freq. (GHz)	VSWR	Description	Temperature(°C)
QAE7-MM			SC (m) to 7/16 DIN (m)	
QAE7-MF	DC~6	1.25	SC (m) to 7/16 DIN (f)	-55~+85
QAE7-FM			SC (f) to 7/16 DIN (m)	
QAE7-FF			SC (f) to 7/16 DIN (f)	

Coaxial Adapters, Right Angle



Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QAVVR-MM			1.85mm (m) to 1.85mm (m), right angle	
QAVVR-MF	DC~67	1.25	1.85mm (m) to 1.85mm (f), right angle	-55~+125
QAVVR-FF			1.85mm (f) to 1.85mm (f), right angle	
QAV2R-MM			1.85mm (m) to 2.4mm (m), right angle	
QAV2R-MF	DC~50	1.2	1.85mm (m) to 2.4mm (f), right angle	-55~+125
QAV2R-FM			1.85mm (f) to 2.4mm (m), right angle	
QAV2R-FF			1.85mm (f) to 2.4mm (m), right angle	
QA22R-MM			2.4mm (m) to 2.4mm (m), right angle	
QA22R-MF	DC~50	1.25	2.4mm (m) to 2.4mm (f), right angle	-60~+165
QA22R-FF			2.4mm (f) to 2.4mm (f), right angle	
QAVKR-MM			1.85mm (m) to 2.92mm (m), right angle	
QAVKR-MF	DC~40	1.15	1.85mm (m) to 2.92mm (f), right angle	-55~+165
QAVKR-FM			1.85mm (f) to 2.92mm (m), right angle	
QAVKR-FF			1.85mm (f) to 2.92mm (f), right angle	
QA2KR-MM			2.4mm (m) to 2.92mm (m), right angle	
QA2KR-MF	DC~40	1.25	2.4mm (m) to 2.92mm (f), right angle	-60~+165
QA2KR-FM			2.4mm (f) to 2.92mm (m), right angle	
QA2KR-FF			2.4mm (f) to 2.92mm (f), right angle	
QAKKR-MM			2.92mm (m) to 2.92mm (m), right angle	
QAKKR-MF	DC~40	1.25	2.92mm (m) to 2.92mm (f), right angle	-60~+165
QAKKR-FF			2.92mm (f) to 2.92mm (f), right angle	
QAV3R-MM			1.85mm (m) to 3.5mm (m), right angle	
QAV3R-MF	DC~33	1.25	1.85mm (m) to 3.5mm (f), right angle	-55~+125
QAV3R-FM			1.85mm (f) to 3.5mm (m), right angle	
QAV3R-FF			1.85mm (f) to 3.5mm (f), right angle	
QA23R-MM			2.4mm (m) to 3.5mm (m), right angle	
QA23R-MF	DC~33	1.25	2.4mm (m) to 3.5mm (f), right angle	-60~+165
QA23R-FM			2.4mm (f) to 3.5mm (m), right angle	
QA23R-FF			2.4mm (f) to 3.5mm (f), right angle	
QAK3R-MM			2.92mm (m) to 3.5mm (m), right angle	
QAK3R-MF	DC~33	1.25	2.92mm (m) to 3.5mm (f), right angle	-55~+165
QAK3R-FM			2.92mm (f) to 3.5mm (m), right angle	
QAK3R-FF			2.92mm (f) to 3.5mm (f), right angle	
QA33R-MM			3.5mm (m) to 3.5mm (m), right angle	
QA33R-MF	DC~33	1.25	3.5mm (m) to 3.5mm (f), right angle	-55~+125
QA33R-FF			3.5mm (f) to 3.5mm (f), right angle	

Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QASSR-MM			SMA (m) to SMA (m), right angle	
QASSR-MF	DC~18	1.3	SMA (m) to SMA (f), right angle	-55~+85
QASSR-FF			SMA (f) to SMA (f), right angle	
QASSR-MM-A			SMA (m) to SMA (m), right angle	
QASSR-MF-A	DC~18	1.2	SMA (m) to SMA (f), right angle	-55~+85
QASSR-FF-A			SMA (f) to SMA (f), right angle	
QASSR-MM-B			SMA (m) to SMA (m), right angle, gold plated brass	
QASSR-MF-B	DC~18	1.2	SMA (m) to SMA (f), right angle, gold plated brass	-55~+85
QASSR-FF-B			SMA (f) to SMA (f), right angle, gold plated brass	
QANNR-MM			N (m) to N (m), right angle	
QANNR-MF	DC~18	1.15	N (m) to N (f), right angle	-55~+85
QANNR-FF			N (f) to N (f), right angle	

**Coaxial Adapters, Quick Connect**

Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QASQS-MM			SMA (m) to quick SMA (m)	
QASQS-FM	DC~26.5	1.3	SMA (f) to quick SMA (m)	-
QASQS-FM-B	DC~18	1.35	SMA (f) to quick SMA (m)	-

**Coaxial Adapters, Reverse-polarity**


Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QASS-MRPF			SMA (m) reverse-polarity to SMA (f)	
QASS-MFRP	DC~18	1.2	SMA (m) to SMA (f) reverse-polarity	-55~+85
QASS-FRPF			SMA (f) reverse-polarity to SMA (f) reverse-polarity	
QASS-FRPF-B			SMA (f) reverse-polarity to SMA (f)	
QASS-MRPF-B	DC~6	1.15	SMA (m) reverse-polarity to SMA (f)	-55~+165
QASS-MRPMRP-B			SMA (m) reverse-polarity to SMA (m) reverse-polarity	
QASS-MFRP-B			SMA (m) to SMA (f) reverse-polarity	

**Coaxial Adapters, NMD**

Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QAMVV-FF	DC~67	1.25	NMD 1.85mm (f) to 1.85mm (f)	-60~+165

**Coaxial Adapters, Bulk Head**


Part Number	Freq.(GHz)	VSWR	Description	Temperature(°C)
QA11H-FF	DC~110	1.3	1.0mm (f) to 1.0mm (f), bulk head	-55~+85
QAVVH-FF	DC~67	1.25	1.85mm (f) to 1.85mm (f), bulk head	-55~+125
QA22H-FF	DC~50	1.25	2.4mm (f) to 2.4mm (f), bulk head	-60~+165
QA33H-FF	DC~33	1.25	3.5mm (f) to 3.5mm (f), bulk head	-55~+125
QAKKH-FF	DC~40	1.25	2.92mm (f) to 2.92mm (f), bulk head	-60~+165
QASSH-FF	DC~18	1.3	SMA (f) to SMA (f), bulk head	-55~+85
QASSH-MF-A	DC~26.5	1.2	SMA (m) to SMA (f), bulk head	-55~+85
QASSH-FF-A			SMA (f) to SMA (f), bulk head	
QASSH-FF-B	DC~26.5	1.2	SMA (f) to SMA (f), bulk head, brass	-55~+85
QAGSH-FF	DC~18	1.3	SSMP (f) to SMA (f), bulk head	-55~+125
QAPSH-MF	DC~18	1.25	SMP (m) to SMA (f), bulk head	-55~+85
QAPSH-FF-1			SMP (f) to SMA (f), bulk head	
QAPSH-FF-2			SMP (f) to SMA (f), bulk head, seal ring	
QASNH-FF-1	DC~18	1.15	SMA (f) to N (f), bulk head, seal ring	-50~+85
QASNH-FF-2			SMA (f) to N (f), bulk head	
QANNH-FF	DC~18	1.15	N (f) to N (f), bulk head	-55~+85
QASBH-FF	DC~4	1.3	SMA (f) to BNC (f), bulk head	-55~+85
QASBH-FF-B	DC~3	1.25	SMA (f) to BNC (f), bulk head, , Nickel plated brass	-55~+155



**Coaxial Adapters, Flange Mount**

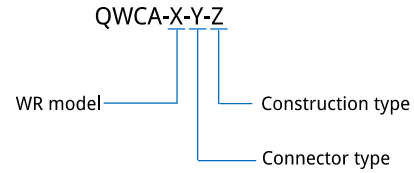
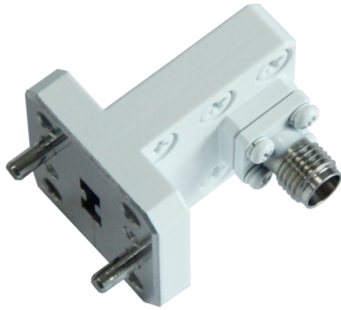

Part Number	Freq. (GHz)	VSWR	Description	Temperature (°C)
QA11L-FF	DC~110	1.3	1.0mm (f) to 1.0mm (f), flange mount	-55~+85
QAVVL-FF	DC~67	1.25	1.85mm (f) to 1.85mm (f), flange mount	-55~+125
QA22L-FF	DC~50	1.25	2.4mm (f) to 2.4mm (f), flange mount	-60~+165
QAKKL-FF	DC~40	1.25	2.92mm (f) to 2.92mm (f), flange mount	-60~+165
QAKPL-FM	DC~40	1.25	2.92mm (f) to SMP (m), flange mount	-60~+165
QA33L-FF	DC~33	1.15	3.5mm (f) to 3.5mm (f), flange mount	-55~+125
QASSL-FF	DC~26.5	1.3	SMA (f) to SMA (f), flange mount	-55~+85
QASSL-FF-A	DC~26.5	1.2	SMA (f) to SMA (f), flange mount	-55~+85
QASSL-MF-B	DC~26.5	1.2	SMA (m) to SMA (f), flange mount, brass	-55~+85
QASSL-FF-B			SMA (f) to SMA (f), flange mount, brass	
QANNL-FF	DC~18	1.2	N (f) to N (f), flange mount	-55~+85
QASNL-FF	DC~18	1.15	SMA (f) to N (f), flange mount	-50~+85
QASNL-FF-B	DC~18	1.20	SMA (f) to N (f), flange mount, Nickel plated brass	-50~+85
QASTL-FF	DC~18	1.25	SMA (f) to TNC (f), flange mount	-50~+85
QASIL-FM	DC~18	1.25	SMA (f) to BMA (m), flange mount	-55~+85
QASIL-FM-02			SMA (f) to BMA (m), 2-hole flange mount	

## Description

The signal transmission in the RF & microwave field need cable to transfer mostly. Coaxial cable and waveguide tube are widely used to transfer RF signal. These two transmission type have great differences in size, material and transmission characteristics. In order to interconnect the two transmission types, a waveguide to coax adapter is needed.

**Features:** Low VSWR;

**Applications:** Wireless, Transmitter, Radar, Laboratory Test etc.



**Examples:** Waveguide to coax adapter, WR-10 to 1.0mm female, end launch, specify QWCA-10-1F-E.

## Naming Rules

Y: Connector type (Female Connector - Add 'F' after connector name);

1.0mm (1), 1.85mm (V), 2.4mm (2), 2.92mm (K), SMA (S), N (N)

Z: Construction Type: End launch (E), Right angle (R)

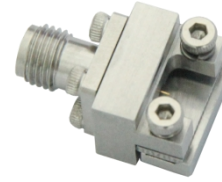
Part Number	Freq. (GHz)	VSWR (max.)	IL (dB, max.)	RF Connectors	Interface	Flange	Construction Type
QWCA-10-Y-Z	75~110	1.4	1.3	1.0mm	WR-10	UG-387/U	E or R
QWCA-12-Y-Z	60~90	1.35	1.1	1.0mm	WR-12	UG-387/U	E or R
QWCA-15-Y-Z	50~75	1.35	0.8	1.0mm	WR-15	UG-385/U	E or R
QWCA-15-Y-Z	49.8~67	2	1	1.85mm	WR-15	FUGP620	E or R
QWCA-19-Y-Z	39.2~59.6	2	1	1.85mm	WR-19	FUGP500	E or R
QWCA-19-Y-Z	40~50	1.35	0.45	2.4mm	WR-19	UG-383/U	E or R
QWCA-22-Y-Z	32.9~50.1	1.5	0.5	2.4mm	WR-22	FAM400	E or R
QWCA-28-Y-Z	26.3~40	1.2	-	2.92mm	WR-28	FBP320	E or R
QWCA-D180-Y-Z	18~40	1.5	-	2.92mm	WRD180	FPWRD180	E or R
QWCA-62-Y-Z	12~18	1.2	0.2	SMA, TNC	WR-62	FBP140	E or R
QWCA-90-Y-Z	8.2~12.5	1.2	-	N	WR-90	FBP100	E or R
QWCA-112-Y-Z	6.57~9.99	1.2	-	SMA, TNC	WR-112	FBP84	E or R
QWCA-159-Y-Z	4.64~7.05	1.2	-	N	WR-159	FDP58	E or R
QWCA-229-Y-Z	3.22~4.9	1.2	-	N, TNC	WR-229	FDP40	E or R
QWCA-430-Y-Z	1.72~2.61	1.2	-	N	WR-430	FDP22	E or R
QWCA-975-Y-Z	0.76~1.15	1.2	-	N	WR-975	FDP9	E or R

## Description

The end launch connector is a kind of connectors, especially used for PCB testing from DC-67GHz, including 3 types of connectors: 2.92mm, 2.4mm and 1.85mm. It is easy to install and disassemble and can be reused.

**Features:** Low VSWR, No Welding, Reusable, Easy Installation;

**Applications:** Laboratory Test.

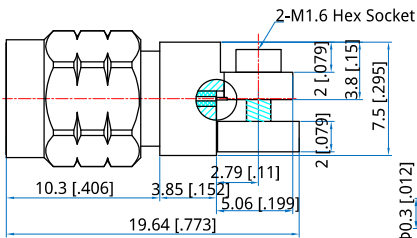


## Specifications

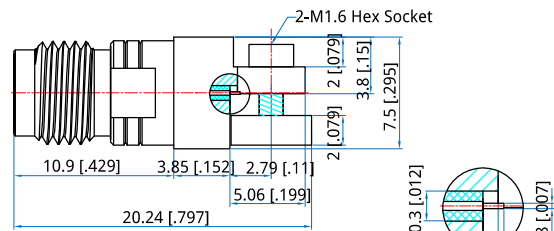
Connector Type	Freq. (GHz)	VSWR (max.)	Outer Conductor	Dielectric	Inner Conductor	Temperature (°C)
1.85mm	DC~67	1.35	Passivated Stainless Steel	PEI & PTFE	Gold Plated Beryllium Copper	-55~+165
2.4mm	DC~50	1.3	Passivated Stainless Steel	PEI & PTFE	Gold Plated Beryllium Copper	-55~+165
2.92mm	DC~40	1.25	Passivated Stainless Steel	PEI & PTFE	Gold Plated Beryllium Copper	-55~+165
SMA	DC~26.5	1.25	Passivated Stainless Steel	PEI & PTFE	Gold Plated Beryllium Copper	-55~+165

## Outline Drawings

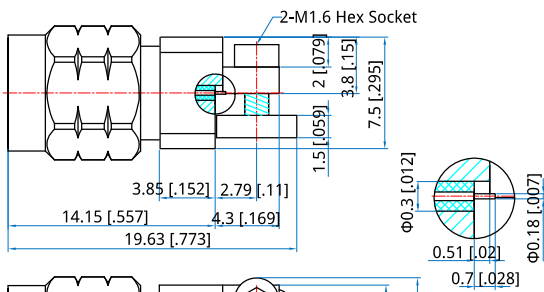
67GHz, 1.85mm



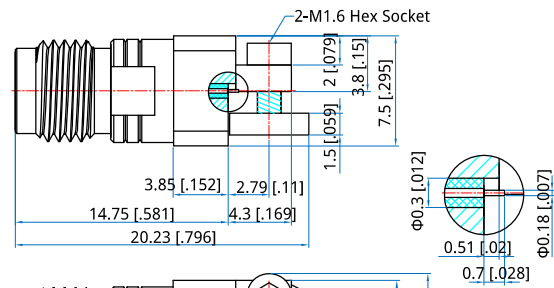
QELC-V-2



QELC-VF-2



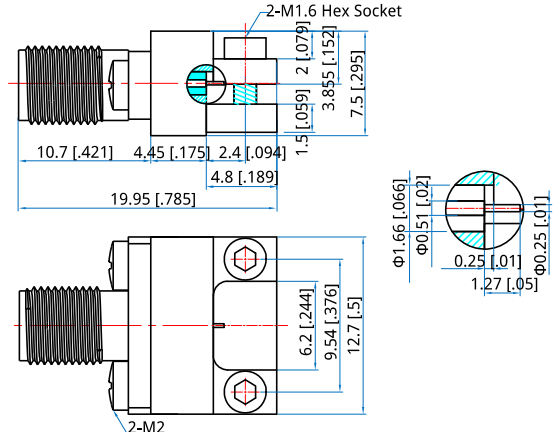
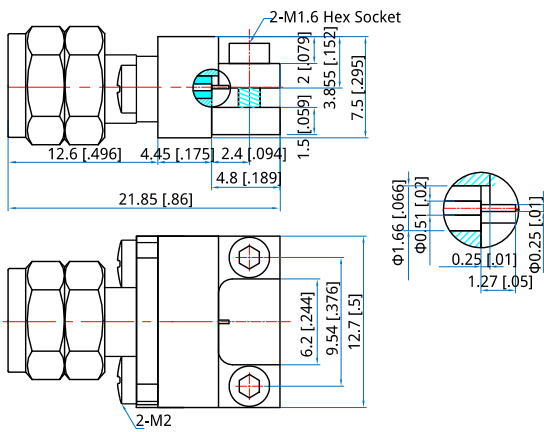
QELC-V-3



QELC-VF-3

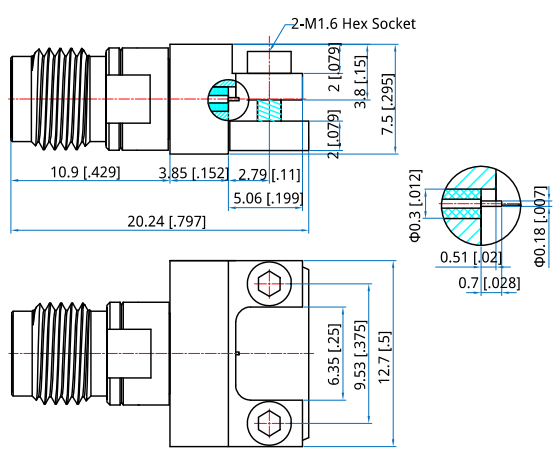
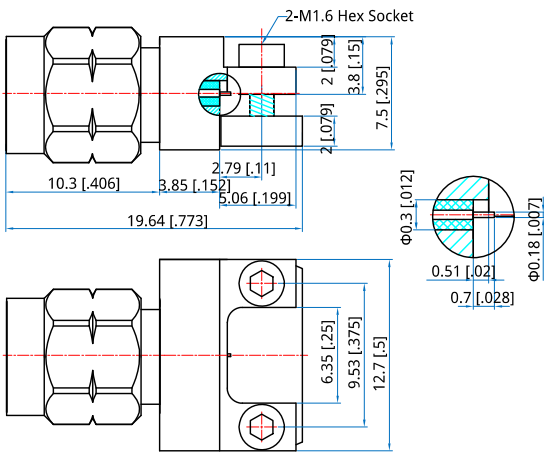
Unit: mm [in]  
Tolerance: ±0.2mm [±0.008in]

50GHz, 2.4mm



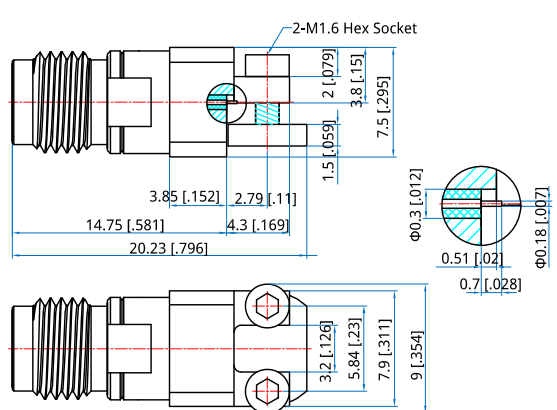
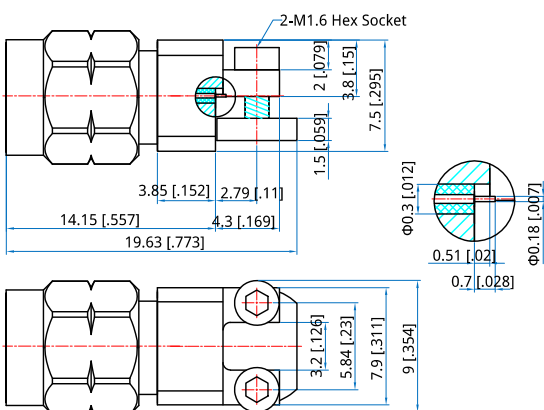
**QELC-2-1**

**QELC-2F-1**



**QELC-2-2**

**QELC-2F-2**

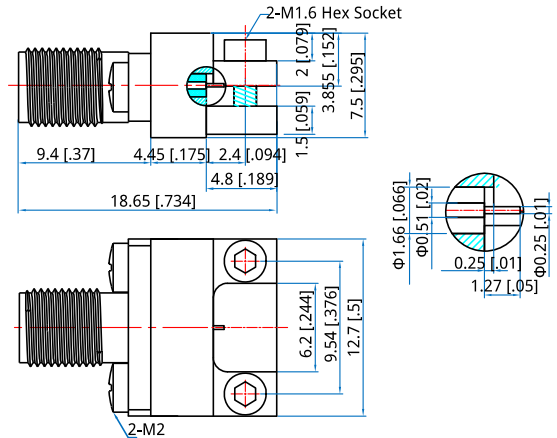
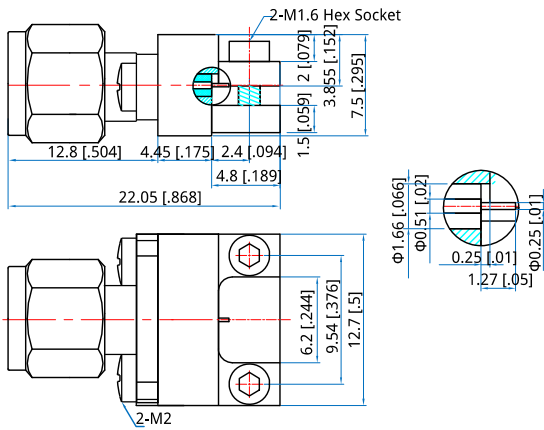


**QELC-2-3**

**QELC-2F-3**

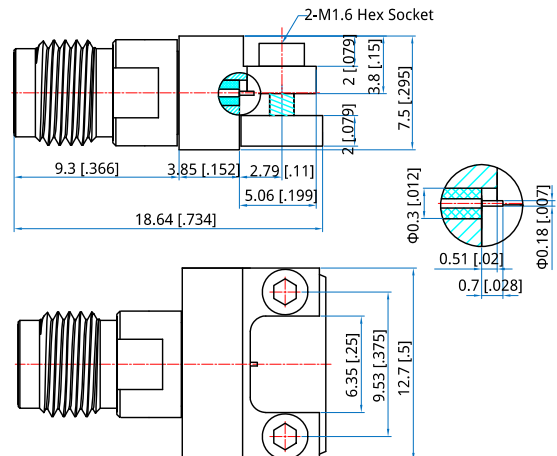
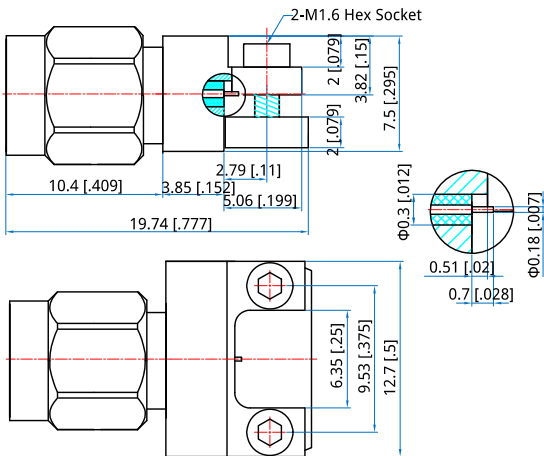
Unit: mm [in]  
Tolerance: ±0.2mm [±0.008in]

40GHz, 2.92mm



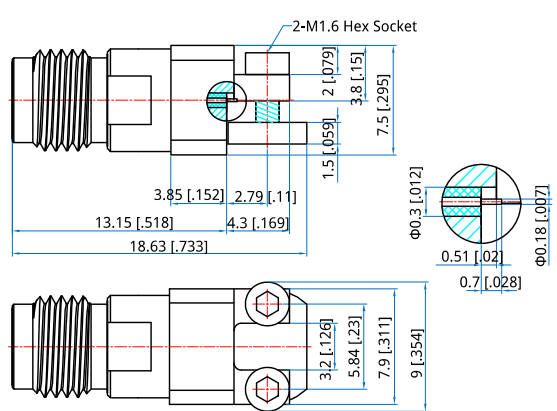
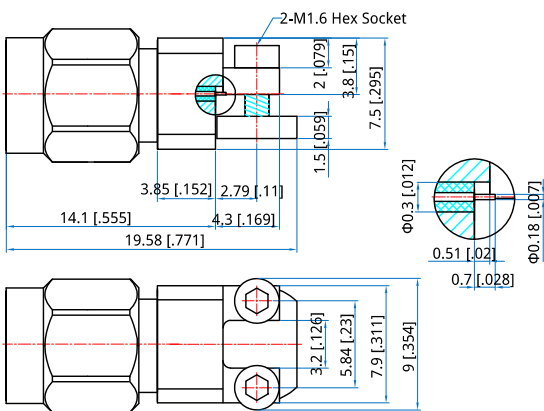
**QELC-K-1**

**QELC-KF-1**



**QELC-K-2**

**QELC-KF-2**

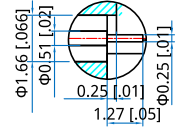
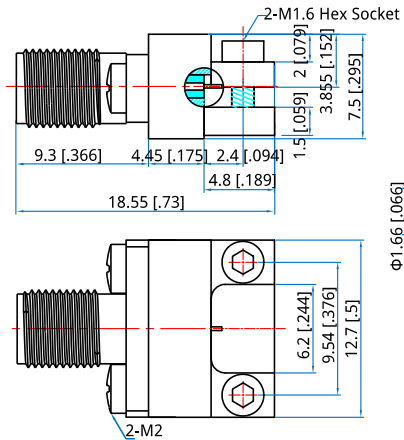
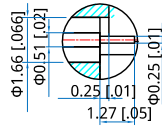
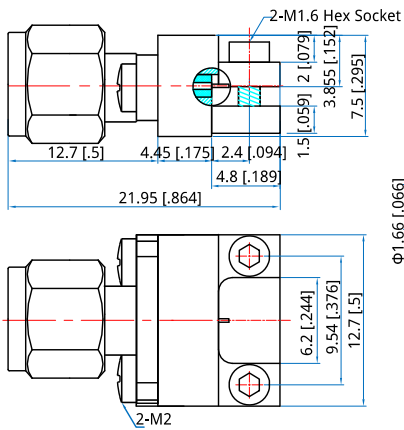


**QELC-K-3**

**QELC-KF-3**

Unit: mm [in]  
Tolerance: ±0.2mm [±0.008in]

## 26.5GHz, SMA



**QELC-S-1**

**QELC-SF-1**

Unit: mm [in]

Tolerance:  $\pm 0.2$ mm [ $\pm 0.008$ in]

**Description**

DC Block is used to block the DC signal for RF circuits.



**Features:** Broadband, Low VSWR, High withstand voltage etc.

**Applications:** Telecom, Instrumentation, Radar, Laboratory Test etc.

**Mechanical**

Outer Conductors: Passivated SUS303 Stainless

Dielectric: PTFE or PEI

Inner Conductors: Gold Plated Beryllium Copper

Part Number	Freq. (GHz)	Insertion Loss (dB, max.)	VSWR (max.)	Voltage (V, max.)	Connector	Size (mm)
QDB-10-67000-VVF	0.01~67	0.4	1.65	25	1.85mm (m) - 1.85mm (f)	18.3
QDB-10-50000-22F					2.4mm (m) - 2.4mm (f)	Φ9*26.8
QDB-10-50000-22	0.01~50	0.8	1.3	50	2.4mm (m) - 2.4mm (m)	Φ9*25.6
QDB-10-50000-2F2F					2.4mm (f) - 2.4mm (f)	Φ9*28
QDB-10-40000-KKF					2.92mm (m) - 2.92mm (f)	Φ9*25
QDB-10-40000-KK	0.01~40	0.8	1.3	50	2.92mm (m) - 2.92mm (m)	Φ9*26
QDB-10-40000-KFKF					2.92mm (f) - 2.92mm (f)	Φ9*24
QDB-10-26500-SSF					SMA (m) - SMA (f)	Φ9*30
QDB-10-26500-SS					SMA (m) - SMA (m)	Φ9*31.1
QDB-10-26500-SFSF	0.01~26.5	0.8	1.3	50	SMA (f) - SMA (f)	Φ9*28.8
QDB-10-26500-33F					3.5mm (m) - 3.5mm (f)	Φ9*33.8
QDB-10-26500-33					3.5mm (m) - 3.5mm (m)	Φ9*34.9
QDB-10-26500-3F3F					3.5mm (f) - 3.5mm (f)	Φ9*32.7
QDB-10-18000-NNF					N (m) - N (f)	L: 42.6
QDB-10-18000-NN	0.01~18	0.6	1.25	50	N (m) - N (m)	L: 43.4
QDB-10-18000-NFNF					N (f) - N (f)	L: 41.8

## Description

Detector is a device to detect useful signal and identify the existence or variation of wave, oscillator or signal. The main technical specifications include frequency range, sensitivity and linearity. The RF signal frequency may be the first parameter to be considered when selecting a detector. The detector must be fast enough to extract the amplitude of the signal. It must also be able to provide a constant response over a considerable frequency range. Sensitivity is the ability of the detector to return useful information when a very low input signal is added to the input. Therefore, the definition of sensitivity is closely related to the ADC / DAC resolution used for signal processing.

**Features:** Broadband, High Sensitivity.

**Applications:** Telecom, Instrumentation, Radar and Laboratory Test.



\*Operating Temperature: 0~+50°C

\*Non-operating Temperature: -20~+70°C

\*Impedance: 50Ω

Part Number	Freq. (GHz)	Sensitivity (mV/mW)	Flatness (dB, max.)	VSWR (max.)	Polarity	Input Power (dBm, max.)	Input Connector	Output Connector	Size (mm)
QD-10-4000-P-S	0.01~4	500	±0.3	1.2	Positive	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-4000-N-S					Negative				
QD-10-8000-P-S	0.01~8	500	±0.3	1.4	Positive	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-8000-N-S					Negative				
QD-10-12000-P-S	0.01~12	500	±0.5	1.5	Positive	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-12000-N-S					Negative				
QD-10-18000-P-S	0.01~18	500	±0.6	1.8	Positive	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-18000-N-S					Negative				
QD-10-26500-P-S	0.01~26.5	180	±1.5	2.2	Positive	20	SMA (m)	SMA (f)	Φ9.2*36
QD-10-26500-N-S					Negative				
QD-10-40000-P-K	0.01~40	150	±3.5	2.2	Positive	20	2.92mm (f)	2.92mm (f)	29.8*9.8*9.8
QD-10-40000-N-K					Negative				

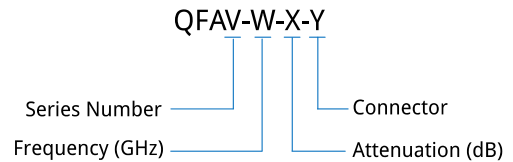


## Description

The function of fixed attenuator is to attenuate the power signal to a certain proportion to achieve safe or ideal power value, which is convenient for testing.

**Features:** High Precision, High Power, Broadband.

**Applications:** Wireless, Transmitter, Radar, Laboratory Test.



## 2W, BNC

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~7	7~20	21~30	40~60		
QFA1802-4-X-3	DC-4	2	0.3	0.5	0.75	0.8	1.25	BNC
QFA1802-6-X-3	DC-6	2	0.3	0.5	0.75	0.8	1.25	BNC

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 14.5 \times L$  mm (Attenuation=1 ~ 30dB, L=35; 40 ~ 60dB, L=38)

\* Temperature: -55~+125°C



## 2W, N

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR (max.)	Connector
	(GHz)		1~10	20	30	40	50	60		
QFA1802-4-X-N	DC-4	2	0.4	0.5	0.6	0.7	0.7	0.8	1.20	N
QFA1802-6-X-N	DC-6	2	0.5	0.6	0.8	0.8	0.8	0.9	1.20	N
QFA1802-12.4-X-N	DC-12.4	2	0.6	0.7	0.8	0.9	1.0	1.1	1.30	N
QFA1802-18-X-N	DC-18	2	0.7	0.8	1.0	1.2	-	-	1.35	N

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 16.5 \times L$  mm (Attenuation=1 ~ 10dB, 20dB, 30dB, L=45; 40dB, 50dB, 60dB, L=48)

\* Temperature: -55~+125°C



## 2W, SMA & TNC

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR (max.)	Connector
	(GHz)		1~10	11~20	21~30	40	50	60		
QFA1802-4-X-S	DC-4	2	0.4	0.5	0.7	0.7	0.7	0.8	1.20	SMA
QFA1802-4-X-T										TNC
QFA1802-8-X-S	DC-8	2	0.5	0.6	0.8	0.8	0.8	0.9	1.25	SMA
QFA1802-8-X-T										TNC
QFA1802-12.4-X-S	DC-12.4	2	0.6	0.7	0.9	0.9	1.0	1.1	1.25	SMA
QFA1802-12.4-X-T										TNC
QFA1802-18-X-S	DC-18	2	0.6	0.8	1.0	1.2	1.5	1.5	1.30	SMA
QFA1802-18-X-T										TNC

\* Above "X" represents attenuation (dB)

\* Size: SMA:  $\Phi 9 \times L$  mm (Attenuation=1 ~ 10dB, 20dB, 30dB, L=27; 40dB, 50dB, 60dB, L=30); TNC:  $\Phi 15 \times 35$  mm

\* Temperature: -55~+125°C



## 2W, SMA

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~30	40	50, 60, 70	80, 90		
QFA2602-26.5-X-S	DC-26.5	2	±1	±1.5	±2	-	1.35	SMA

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 9 \times L$ mm (Attenuation=1~20dB, L=27; Attenuation=30dB, L=30);  $\Phi 10 \times 43$ mm (Attenuation=40~90dB)

\* Temperature: -55~+85°C



**2W, 3.5mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~30	40	50	60~70		
QFA2602-26.5-X-3	DC-26.5	2	-0.3/+1	-1/+1.5	±1.5	±1	1.25	3.5mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ10\*L mm (Attenuation=1 ~ 30dB, L=37; 40dB, L=40.3; 50 ~ 70dB, L=46)  
 \* Temperature: -55~+85°C



**2W, 2.92mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		0~3	4~15	20/25	30		
QFA4002-40-X-K	DC-40	2	±0.6	±0.7	±0.8	±1	1.25	2.92mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ9\*17.2 mm  
 \* Temperature: -55~+125°C



**2W, 2.4mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~10	20	30	40~50		
QFA5002-50-X-2	DC-50	2	±1.0	-1.0/+1.2	-1.0/+1.2	±1.5	1.45	2.4mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ9\*19.7mm ( Attenuation=1~30dB, 2.4mm male & female ) ;Φ8\*42.6mm ( Attenuation=40~50dB, 2.4mm male & female ) ;Φ7.6\*30.8mm ( Attenuation=5dB, 2.4mm female )  
 \* Temperature: -55~+125°C



**2W, 1.85mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR (max.)	Connector
	(GHz)		1~10	20	30		
QFA6702-67-X-V	DC-67	2	-1.0/+1.2	±1.2	±1.5	1.35	1.85mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ9\*18.5mm  
 \* Temperature: -55~+125°C



**5W, N**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~10	11~20	21~30	31~40		
QFA1805-4-X-N	DC-4	5	0.4	0.5	0.6	0.7	1.20	N
QFA1805-6-X-N	DC-6	5	0.5	0.6	0.8	0.8	1.25	N
QFA1805-12.4-X-N	DC-12.4	5	0.6	0.7	0.8	0.9	1.35	N
QFA1805-18-X-N	DC-18	5	0.6	0.8	1.0	1.2	1.45	N

\* Above "X" represents attenuation (dB)  
 \* Size: Φ16.5\*58 mm  
 \* Temperature: -55~+125°C



## 5W, SMA

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR (max.)	Connector
	(GHz)		1~10	11~20	21~30		
QFA1805-4-X-S	DC-4	5	0.4	0.5	0.7	1.20	SMA
QFA1805-8-X-S	DC-8	5	0.5	0.6	0.8	1.25	SMA
QFA1805-12.4-X-S	DC-12.4	5	0.6	0.7	0.9	1.35	SMA
QFA1805-18-X-S	DC-18	5	0.6	0.8	1.0	1.45	SMA

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 19 \times 27$  mm

\* Temperature: -55~+125°C



## 5W, SMA

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR (max.)	Connector
	(GHz)		1~10	20	30	40	50		
QFA2605-26.5-X-S	DC-26.5	5	±0.7	±0.7	±0.8	-0.5/+1.5	-0.5/+1.5	1.35	SMA

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 19 \times L$ mm (Attenuation=1~20dB, L=27; Attenuation=30dB, L=30);  $\Phi 16.5 \times 37$ mm (Attenuation=40~50dB)

\* Temperature: -55~+85°C



## 5W, 3.5mm

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR (max.)	Connector	
	(GHz)		1~10	11~30	40	50~60	70			80
QFA2605-26.5-X-3	DC-26.5	5	±1	-0.5/+1.2	-0.5/+1.2	-1/+1.5	-1/+1.5	-1.2/+1.5	1.25	3.5mm

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 15.7 \times 37$ mm (Attenuation=1~30dB);  $\Phi 16.5 \times 40.3$ mm (Attenuation=40dB);  $\Phi 16.5 \times 46$ mm (Attenuation=50~80dB)

\* Temperature: -55~+85°C



## 5W, 2.92mm

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR (max.)	Connector
	(GHz)		1~10	20, 30	40		
QFA4005-40-X-K	DC-40	5	-0.7/+1.0	-0.7/+1.0	-1.0/+2.0	1.25, 1.40@40dB	2.92mm

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 15.8 \times 39.6$ mm (Attenuation=1~30dB),  $\Phi 38 \times 47.6$ mm (Attenuation=40dB)

\* Temperature: -55~+85°C



## 5W, 2.4mm

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR (max.)	Connector
	(GHz)		1~10	20	30		
QFA5005-50-X-2	DC-50	5	-1.0/+1.2	-1.0/+1.2	-1.0/+1.2	1.3	2.4mm

\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector):  $\Phi 31.8 \times 17.8$ mm

\* Temperature: -55~+125°C



## 5W, 1.85mm

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR (max.)	Connector
	(GHz)		1~10	20	30		
QFA6705-67-X-V	DC-67	5	-1.0/+1.5	-1.2/+1.5	-1.5/+2.0	1.4	1.85mm

\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector):  $\Phi 31.8 \times 17.8$ mm

\* Temperature: -55~+125°C



**10W, N & SMA**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		1~10	11~20	21~30	31~40		
QFA1810-4-X-N	DC-4	10	0.4	0.5	0.6	0.7	1.20	N
QFA1810-4-X-S								SMA
QFA1810-8-X-N	DC-8	10	0.5	0.6	0.8	0.8	1.25	N
QFA1810-8-X-S								SMA
QFA1810-12.4-X-N	DC-12.4	10	0.6	0.7	0.8	0.9	1.35	N
QFA1810-12.4-X-S								SMA
QFA1810-18-X-N	DC-18	10	0.8	0.9	1.0	1.2	1.45	N
QFA1810-18-X-S								SMA

\* Above "X" represents attenuation (dB)

\* Size: N:  $\Phi 30 \times 84.5$ mm; SMA:  $\Phi 15.8 \times 47.5$ mm

\* Temperature: -55~+125°C


**10W, SMA**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		3, 6	10	20	30, 40		
QFA2610-26.5-X-S	DC-26.5	10	-0.5/+1.0	-0.5/+1.5	-0.5/+1.2	±1.2	1.35	SMA

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 16.5 \times 46.5$ mm

\* Temperature: -55~+85°C


**10W, 3.5mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR (max.)	Connector
	(GHz)		1~10	20, 30	40	50	60	70		
QFA2610-26.5-X-3	DC-26.5	10	±1	-0.5/+1.	-0.5/+1.	-1/+1.5	-1/+1.5	-1.2/+1.	1.25	3.5mm

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 26 \times 45.8$ mm

\* Temperature: -55~+85°C


**10W, 2.92mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)	Connector
	(GHz)		10	20	30	40		
QFA4010-40-X-K	DC-40	10	-0.7/+1.0	-0.7/+1.0	-0.7/+1.0	-1.0/+2.0	1.25, 1.4@40dB	2.92mm

\* Above "X" represents attenuation (dB)

\* Size:  $\Phi 31.8 \times 39.6$ mm (Attenuation=1~30dB);  $\Phi 38 \times 47.6$ mm (Attenuation=40dB)

\* Temperature: -55~+85°C



**20W, N & SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR ( max. )	Connector
	(GHz)		1~10	11~20	21~30	31~40		
QFA1820-4-X-N	DC-4	20	0.4	0.5	0.6	0.7	1.20	N
QFA1820-4-X-S								SMA
QFA1820-8-X-N	DC-8	20	0.5	0.6	0.8	0.8	1.25	N
QFA1820-8-X-S								SMA
QFA1820-12.4-X-N	DC-12.4	20	0.6	0.7	0.8	0.9	1.35	N
QFA1820-12.4-X-S								SMA
QFA1820-18-X-N	DC-18	20	0.6	0.8	1.0	1.2	1.45	N
QFA1820-18-X-S								SMA



\* Above "X" represents attenuation (dB)  
 \* Size: N:  $\Phi 38 \times 84.5$  mm; SMA:  $\Phi 30 \times 89.5$  mm  
 \* Temperature: -55--+125°C

**20W, SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR ( max. )	Connector
	(GHz)		10	20	30		
QFA2620-26.5-X-S	DC-26.5	20	-1.5/+1.5	-1.5/+1.5	-1.5/+1.5	1.3	SMA



\* Above "X" represents attenuation (dB)  
 \* Size:  $\Phi 44 \times 54.7$  mm  
 \* Temperature: -55--+125°C

**20W, 2.92mm**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR ( max. )	Connector
	(GHz)		3~10	15	20	30	40		
QFA4020-40-X-K	DC-40	20	-1.5/+1.5	-1.5/+1.5	-1.5/+1.5	-1.5/+1.5	-1.0/+2.0	1.3, 1.4@40dB	2.92mm



\* Above "X" represents attenuation (dB)  
 \* Size:  $\Phi 44 \times 55.6$  mm (Attenuation=3~30dB);  $\Phi 45 \times 96$  mm (Attenuation=40dB)  
 \* Temperature: -55--+85°C

**25W, N & SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR ( max. )	Connector
	(GHz)		1~10	11~20	21~30	40~50		
QFA1825-4-X-N	DC-4	25	0.4	0.5	0.6	0.7	1.20	N
QFA1825-4-X-S								SMA
QFA1825-8-X-N	DC-8	25	0.5	0.6	0.8	0.8	1.25	N
QFA1825-8-X-S								SMA
QFA1825-12.4-X-N	DC-12.4	25	0.7	0.8	0.9	1.0~1.1	1.35	N
QFA1825-12.4-X-S								SMA
QFA1825-18-X-N	DC-18	25	0.8	0.9	1.1	1.2~1.3	1.45	N
QFA1825-18-X-S								SMA



\* Above "X" represents attenuation (dB)  
 \* Size: N:  $\Phi 44 \times 89$  mm; SMA:  $\Phi 44 \times 94$  mm  
 \* Temperature: -55--+125°C

**30W, N & SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR ( max. )	Connector
	(GHz)		1-10	11-20	21-30	31-40		
QFA1830-4-X-N	DC-4	30	0.4	0.5	0.6	0.7	1.20	N
QFA1830-4-X-S								SMA
QFA1830-6-X-N	DC-6	30	0.5	0.6	0.8	0.8	1.25	N
QFA1830-6-X-S								SMA
QFA1830-12.4-X-N	DC-12.4	30	0.6	0.7	0.8	0.9	1.35	N
QFA1830-12.4-X-S								SMA
QFA1830-18-X-N	DC-18	30	0.8	0.9	1.2	1.5	1.45	N
QFA1830-18-X-S								SMA



\* Above "X" represents attenuation (dB)  
 \* Size: N: Φ38\*105 mm; SMA: Φ38\*110 mm  
 \* Temperature: -55--+125°C

**30W, SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR ( max. )	Connector
	(GHz)		20	30	40		
QFA2630-26.5-X-S	DC-26.5	30	-1.5/+1.5	-1.5/+1.5	-1.5/+1.5	1.3	SMA



\* Above "X" represents attenuation (dB)  
 \* Size: Φ54\*62.7mm  
 \* Temperature: -55--+125°C

**30W, 2.92mm**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)			VSWR ( max. )	Connector
	(GHz)		20	30	40		
QFA4030-40-X-K	DC-40	30	-1.5/+2.0	-1.5/+2.0	-1.5/+2.0	1.35	2.92mm



\* Above "X" represents attenuation (dB)  
 \* Size: Φ54\*63.6mm  
 \* Temperature: -55--+125°C

**50W, N & SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR ( max. )	Connector
	(GHz)		1-10	11-20	21-30	31-50		
QFA1850-4-X-N	DC-4	50	0.4	0.5	0.7	0.7	1.20	N
QFA1850-4-X-S								SMA
QFA1850-8-X-N	DC-8	50	0.5	0.6	0.8	0.8	1.25	N
QFA1850-8-X-S								SMA
QFA1850-12.4-X-N	DC-12.4	50	0.6	0.7	0.8	1.1	1.35	N
QFA1850-12.4-X-S								SMA
QFA1850-18-X-N	DC-18	50	0.8	0.9	1.1	1.3	1.45	N
QFA1850-18-X-S								SMA



\* Above "X" represents attenuation (dB)  
 \* Size: N: Φ64\*105 mm; SMA: Φ64\*110.5 mm  
 \* Temperature: -55--+125°C

**50W, SMA**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR	Connector
	(GHz)		20	30	40	50	60	( max. )	
QFA2650-26.5-X-S	DC-26.5	50	±2	±2	±2	±1	±1	1.30	SMA

\* Above "X" represents attenuation (dB)  
 \* Size: Φ54\*109.7mm (Attenuation=20~40dB); Φ63\*71mm (Attenuation=50~60dB)  
 \* Temperature: -55~+85°C



**50W, 3.5mm**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR	Connector	
	(GHz)		3	6	10	20~30	40	50	60		( max. )
QFA2650-12.4-X-3	DC-12.4	50	-0.8/+0.	±1	±1	±0.9	-1/+0.5	-1/+0.75	-1/+0.5	1.2	3.5mm
QFA2650-18-X-3	DC-18	50	±0.8	±1	±1	±1	±1	±1	-1/+0.75	1.25	3.5mm
QFA2650-26.5-X-3	DC-26.5	50	-0.8/+1.	-1/+1.7	-1/+2.5	±1	±1	±1	±1	1.30	3.5mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ63\*74mm  
 \* Temperature: -55~+85°C



**50W, 2.92mm**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs.			VSWR	Connector
	(GHz)		20	30	40	( max. )	
QFA4050-40-X-K	DC-40	50	±3.0	±3.0	±3.0	1.35	2.92mm

\* Above "X" represents attenuation (dB)  
 \* Size: Φ54\*109.8mm  
 \* Temperature: -55~+125°C



**100W, N & SMA & 7/16(DIN)**

Part Number	Freq.	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR	Connector
	(GHz)		3	6~10	11~20	21~30	31~40	41~60	( max. )	
QFA18K1-4-X-N										N
QFA18K1-4-X-S	DC-4	100	0.4	0.7	0.7	0.8	0.8	0.9-1.0	1.20	SMA
QFA18K1-4-X-7										7/16(DIN)
QFA18K1-8-X-N										N
QFA18K1-8-X-S	DC-8	100	0.5	0.8	0.8	0.9	0.9	1.0	1.25	SMA
QFA18K1-8-X-7										7/16(DIN)
QFA18K1-12.4-X-N										N
QFA18K1-12.4-X-S	DC-12.4	100	0.6	0.9	0.9	1.0	1.0	1.1	1.35	SMA
QFA18K1-12.4-X-7										7/16(DIN)
QFA18K1-18-X-N										N
QFA18K1-18-X-S	DC-18	100	0.8	1.5	1.5	1.3	1.3	1.4	1.45	SMA
QFA18K1-18-X-7										7/16(DIN)

\* Above "X" represents attenuation (dB)  
 \* You could choose the shape for attenuator when the connector is SMA or N, If you choose cylinder, please add " 1" at the end of Part Number; Cuboid, please add " 2"  
 \* Size: N: Φ64\*L (Attenuation=3dB, L=105; Attenuation=6~60dB, L=156) or 156\*120\*110 mm; SMA: Φ64\*161 or 161\*120\*110 mm; 7/16(DIN): Φ41\*179±2 mm  
 \* Temperature: -55~+125°C



## 100W, 3.5mm & SMA

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR ( max. )	Connector
	(GHz)		3	6	10	20	30-50		
QFA26K1-26.5-X-3	DC-26.5	100	-1.0/+1.5	-1.0/+2.5	-1.0/+3.5	-1.0/+3.0	-1.0/+1.5	1.40	3.5mm
QFA26K1-26.5-X-5	DC-26.5	100	-1.0/+1.5	-1.0/+2.5	-1.0/+3.5	-1.0/+3.0	-1.0/+1.5	1.40	SMA

\* Above "X" represents attenuation (dB)

\* Size: Φ63\*129 mm

\* Temperature: -55→+85°C



## 150W, N & SMA

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR ( max. )	Connector	
	(GHz)		3	6-10	20	30	40			50-60
QFA18K15-4-X-N	DC-4	150	0.7	0.7	0.7	0.8	0.9	0.9	1.20	N
QFA18K15-4-X-S										SMA
QFA18K15-8-X-N	DC-8	150	0.8	0.8	0.8	0.9	0.9	0.9	1.25	N
QFA18K15-8-X-S										SMA
QFA18K15-12.4-X-N	DC-12.4	150	-	0.9	0.9	1.0	1.1	1.1	1.35	N
QFA18K15-12.4-X-S										SMA
QFA18K15-18-X-N	DC-18	150	-	2.0	1.5	1.5	1.3	1.4	1.45	N
QFA18K15-18-X-S										SMA

\* Above "X" represents attenuation (dB)

\* You could choose the shape for attenuator when the connector is SMA or N, If you choose cylinder, please add " 1" at the end of Part Number; Cuboid, please add " 2"

\* Size (Exclude Connector): 3dB: Φ64\*121 or 101\*120\*110mm; 6-60dB: Φ64\*195 or 152\*120\*110mm

\* Temperature: -55→+125°C



## 200W, N

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR ( max. )	Connector
	(GHz)		10	20	30	40, 50, 60		
QFA18K2-4-X-N	DC-4	200	0.7	0.7	0.8	0.9	1.20	N
QFA18K2-8-X-N	DC-8	200	0.8	0.8	0.9	0.9	1.25	N
QFA18K2-12.4-X-N	DC-12.4	200	0.9	0.9	1.0	1.1	1.35	N
QFA18K2-18-X-N	DC-18	200	2.0	-	1.5	1.4	1.45	N

\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector): 203\*120\*110 mm

\* Temperature: -55→+125°C



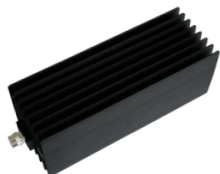
## 250W, N

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR ( max. )	Connector
	(GHz)		10	20	30	40	50-60		
QFA18K25-4-X-N	DC-4	250	0.7	0.7	0.8	0.9	0.9	1.20	N
QFA18K25-8-X-N	DC-8	250	0.8	0.8	0.9	0.9	0.9	1.25	N
QFA18K25-12.4-X-N	DC-12.4	250	2.5	0.9	1.0	1.1	1.1	1.35	N
QFA18K25-18-X-N	DC-18	250	3	-	1.5	1.4	1.4	1.45	N

\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector): 254\*120\*110 mm

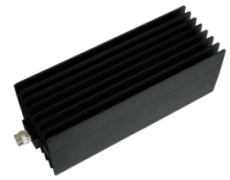
\* Temperature: -55→+125°C





**300W, N**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)								VSWR ( max. )	Connector
	(GHz)		3	6	10	20	30	40	50	60		
QFA18K3-3-X-N	DC-3	300	0.5	-	-	-	-	-	-	-	1.20	N
QFA18K3-4-X-N	DC-4	300	-	-	0.7	0.7	0.8	0.9	0.9	0.9	1.20	N
QFA18K3-6-X-N	DC-6	300	1	1.2	-	-	-	-	-	-	1.25	N
QFA18K3-8-X-N	DC-8	300	-	-	0.8	0.8	0.9	0.9	0.9	0.9	1.25	N
QFA18K3-12.4-X-N	DC-12.4	300	-	-	3.0	0.9	1.0	1.1	1.1	1.1	1.35	N
QFA18K3-18-X-N	DC-18	300	-	-	3.5	-	1.5	1.3	1.3	1.4	1.45	N



\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector): 305\*120\*110 mm (Attenuation=10-60dB, DC-18GHz); 152\*120\*110 mm (Attenuation=3dB, DC-3GHz); 254\*120\*110 mm (Attenuation=6dB, DC-6GHz)

\* Temperature: -55--+125°C

**500W, N**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)					VSWR ( max. )	Connector
	(GHz)		3	10	20	30	40, 50, 60		
QFA18K5-3-X-N	DC-3	500	-0.6/+1.5	-	-	-	-	-	N
QFA18K5-4-X-N	DC-4	500	2.3	-0.6/+1.5	1.2	1.0	1.0	1.25	N
QFA18K5-8-X-N	DC-8	500	3.5	-0.5/+2.0	2.0	1.5	1.1	1.30	N
QFA18K5-12.4-X-N	DC-12.4	500	-	3.0	2.0	-1.5/+2.0	1.2	1.35	N
QFA18K5-18-X-N	DC-18	500	-	6.0	5.0	0/+6.0	1.5	1.50	N



\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector): 305\*120\*110mm (Attenuation=10-60dB); 254\*120\*110mm (Attenuation=3dB)

\* Temperature: -55--+125°C

**600W, N**

Part Number	Freq. Range	Avg. Power (W@25°C)	Attenuation Accuracy (±dB) vs. Attenuation (dB)								VSWR ( max. )	Connector
	(GHz)		3	6	10	20	30	40	50, 60			
QFA18K6-4-X-N	DC-4	600	0/+2	-1/+1.5	-0.6/+1.5	1.2	1	1.0	1.0	1.25	N	
QFA18K6-8-X-N	DC-8	600	-	-	-0.5/+2.0	2	1.1	1.1	1.1	1.30	N	
QFA18K6-12.4-X-N	DC-12.4	600	-	-	3	2	-1.5/+2	1.2	1.2	1.35	N	
QFA18K6-18-X-N	DC-18	600	-	-	6	5	-2/+6	2	1.5	1.50	N	



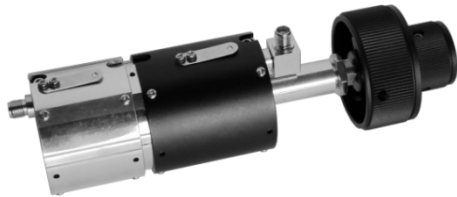
\* Above "X" represents attenuation (dB)

\* Size (Exclude Connector): L\*120\*110mm (Attenuation=3dB, L=305; Attenuation=6dB, L=407; Attenuation=10-60dB, L=509)

\* Temperature: -55--+125°C

## Description

Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

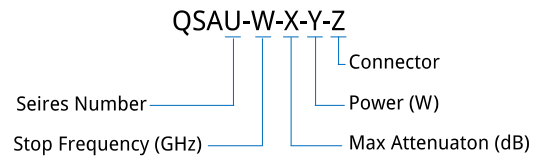


### Features:

- \* Low VSWR
- \* Wide Attenuation Range

### Applications:

- \* Wireless
- \* Radar
- \* Laboratory Test



**Examples:** Rotary Stepped Attenuator, QSA06A Series, DC~6GHz, 0~60dB attenuation, 2W, SMA female, specify QSA06A-6-60-2-S.

### Naming Rules

- U: Series Number
- W: Stop Frequency in GHz
- X: Max Attenuation in dB
- Y: Power in Watts
- Z: Connector: 2.92mm (K), 3.5mm (3), SMA (S), N (N)

## QSA40, DC~40GHz, 0~9dB, 2W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA40-32-9-2-Z	DC~32	0~9/1	1.8	2	1.2	2	2.92mm, 3.5mm
QSA40-40-9-2-Z	DC~40		1.9	2.2	1.5		

## QSA28, DC~28GHz, 0~90dB, 25W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA28-18-9-Y-Z	DC~18	0~9/1	1.6	1	0.8	2, 10	SMA, 3.5mm
QSA28-26.5-9-Y-Z	DC~26.5		1.7	1.8	1		
QSA28-28-9-10-Z	DC~28	0~70/10	1.75	1.8	1.5	10	SMA, 3.5mm
QSA28-18-70-Y-Z	DC~18		1.6	1	1.5 / 4%		
QSA28-26.5-60-Y-Z	DC~26.5	0~60/10	1.75	1.8	1.5 / 4%	2, 10	SMA, 3.5mm
QSA28-8-90-Y-Z	0.1~8	0~90/10	1.6	1	1.5 / 4%	2, 10	SMA, 3.5mm
QSA28-12.4-90-Y-Z	0.1~12.4						
QSA28-18-90-Y-Z	0.1~18						
QSA28-18-70-25-Z	DC~18	0~70/10	1.6	1	1.5 / 4%	25	SMA, 3.5mm
QSA28-26.5-70-25-Z	DC~26.5		1.75	1.8	1.5 / 4%		
QSA28-28-70-25-Z	DC~28		1.75	1.8	2 / 5%		

## QSA26A, DC~26.5GHz, 0~99dB, 10W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA26-8-69-Y-Z	DC~8	0~69/1	1.5	1.25	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 10	N, SMA, 3.5mm
QSA26-12.4-69-Y-Z	DC~12.4		1.6	1.5			
QSA26-18-69-Y-Z	DC~18		1.75	1.75			
QSA26-26.5-69-2-3	DC ~ 26.5		1.85	2	1.5 (0~9dB), 1.75 (10~19dB), 2 (20~49dB), 2.5 (50~69dB)	2	3.5mm
QSA26-8-99-2-Z	DC~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 / 3.5% (70~99dB)	2	N, SMA, 3.5mm
QSA26-12.4-99-2-Z	DC~12.4		1.5	1.5			
QSA26-18-99-2-Z	DC~18		1.75	1.5			
QSA26-8-99-10-Z	0.1~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 / 3.5% (70~99dB)	10	N, SMA, 3.5mm
QSA26-12.4-99-10-Z	0.1~12.4		1.6	1.5			
QSA26-18-99-10-Z	0.1~18		1.75	1.75			

## QSA26B, DC~26.5GHz, 0~60dB, 25W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA26-26.5-60-Y-S	DC~26.5	0~60/10	1.8	1.8	1.5 or 4%	25	SMA

## QSA18A, DC~18GHz, 0~80dB, 10W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA18A-8-9-Y-S	DC~8	0~9/1	1.4	0.8	0.6	2, 10	SMA
QSA18A-12.4-9-Y-S	DC~12.4		1.5	1	0.8		
QSA18A-18-9-Y-S	DC~18		1.6	1.2	1		
QSA18A-8-90-Y-S	DC~8	0~90/10	1.4	1	1.5 (0~60dB), 2.5 / 3.5% (70~90dB)	2, 10	SMA
QSA18A-12.4-90-Y-S	DC~12.4		1.5	1.2			
QSA18A-18-90-Y-S	DC~18		1.6	1.5			
QSA18A-18-70-Y-S	DC~18	0~70/10	1.65	1	1.5 or 4%	25	SMA

## QSA18B, DC~18GHz, 0~99dB, 5W

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA18B-8-69-Y-S	DC~8	0~69/1	1.5	1	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 5	SMA
QSA18B-12.4-69-Y-S	DC~12.4		1.6	1.25			
QSA18B-18-69-Y-S	DC~18		1.75	1.5			
QSA18B-8-99-Y-S	0.1~8	0~99/1	1.5	1	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 / 3.5% (70~99dB)	2, 5	SMA
QSA18B-12.4-99-Y-S	0.1~12.4		1.6	1.25			
QSA18B-18-99-Y-S	0.1~18		1.75	1.5			

## QSA06A, DC~6GHz, 0~90dB, 10W

Part Number	Freq.	Attenuation ( dB )	VSWR		Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )		( Max. )	( Max. )				
QSA06A-2.5-1-Y-Z	DC~2.5	0~1/0.1	1.25		0.5	0.2	2, 10	SMA, N
QSA06A-3-1-Y-Z	DC~3		1.3		0.5	0.2		
QSA06A-4.3-1-Y-Z	DC~4.3		1.35		0.75	0.3		
QSA06A-6-1-Y-Z	DC~6		1.4		1	0.3		
QSA06A-2.5-10-Y-Z	DC~2.5	0~10/1	1.25		0.4	0.4	2, 10	SMA, N
QSA06A-3-10-Y-Z	DC~3		1.3		0.5	0.5		
QSA06A-4.3-10-Y-Z	DC~4.3		1.35		0.75	0.5		
QSA06A-6-10-Y-Z	DC~6		1.4		1	0.5		
QSA06A-2.5-60-Y-Z	DC~2.5	0~60/10	1.25		0.4	0.5	2, 10	SMA, N
QSA06A-3-60-Y-Z	DC~3		1.3		0.5	0.5 (1~50dB), 0.8 / ±3% (50~60dB)		
QSA06A-4.3-60-Y-Z	DC~4.3		1.35		0.75			
QSA06A-6-60-Y-Z	DC~6		1.4		1			
QSA06A-2.5-90-Y-Z	DC~2.5	0~90/10	1.25		0.4	0.5 (1~50dB), ±3% (50~90dB)	2, 10	SMA, N
QSA06A-3-90-Y-Z	DC~3		1.3		0.5	0.5 (1~50dB), ±3.5% (50~90dB)		

## QSA06B, DC~6GHz, 0~100dB, 10W

Part Number	Freq. ( GHz )	Attenuation ( dB )	VSWR		Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
			SMA	N				
QSA06B-2.5-11-Y-Z	DC~2.5	0~11/0.1	1.3	1.45	1	0.2 (1dB), 0.4(2~11dB)	2, 10	SMA, N
QSA06B-3-11-Y-Z	DC~3		1.35	1.45	1.2	0.3 (1dB), 0.5(2~11dB)		
QSA06B-4.3-11-Y-Z	DC~4.3		1.4	1.55	1.5			
QSA06B-6-11-Y-Z	DC~6		1.55	1.6	1.8			
QSA06B-2.5-50-Y-Z	DC~2.5	0~50/1	1.3	1.35	1	0.5 (1~10dB), 0.8 / 3% (50~60dB)	2, 10	SMA, N
QSA06B-2.5-70-Y-Z	DC~2.5	0~70/1	1.3	1.45	1	0.5 (1~10dB), 0.8 / 3% (11~59dB), 1.5 / 3% (60~70dB)	2, 10	SMA, N
QSA06B-3-70-Y-Z	DC~3		1.35	1.45	1.2			
QSA06B-4.3-70-Y-Z	DC~4.3		1.4	1.55	1.5			
QSA06B-6-70-Y-Z	DC~6		1.55	1.6	1.8			
QSA06B-2.5-100-Y-Z	DC~2.5	0~100/1	1.3	1.45	1	0.5 (1~10dB), 0.8 / 3% (11~59dB),	2, 10	SMA, N
QSA06B-3-100-Y-Z	DC~3		1.35	1.45	1.2	1.5 / 3% (60~69dB), ±3.5% (70~100dB)		

**QSA06C, DC~6GHz, 0~100dB, 10W**

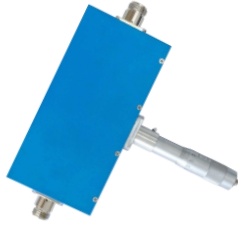
Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA06C-2.5-11-Y-N	DC~2.5	0~11/0.1	1.4	1.2	0.3 (1dB), 0.5 (2~11dB)	2, 10	N
QSA06C-3-11-Y-N	DC~3		1.45	1.2			
QSA06C-4.3-11-Y-N	DC~4.3		1.5	1.5			
QSA06C-6-11-Y-N	DC~6		1.65	1.8			
QSA06C-2.5-70-Y-N	DC~2.5	0~70/1	1.4	1.2	0.8 / 3% (0~60dB), 1.5 / 3% (61~70dB)	2, 10	N
QSA06C-3-70-Y-N	DC~3		1.45	1.2			
QSA06C-4.3-70-Y-N	DC~4.3		1.5	1.5			
QSA06C-6-70-Y-N	DC~6		1.65	1.8			
QSA06C-2.5-100-Y-N	DC~2.5	0~100/1	1.4	1.2	0.8 / 3% (0~59dB), 1.5 / 3% (60~69dB), ±3.5% (70~100dB)	2, 10	N
QSA06C-3-100-Y-N	DC~3		1.45	1.2			

**QSA06D, DC~6GHz, 0~101dB, 10W**

Part Number	Freq.	Attenuation ( dB )	VSWR ( Max. )	Insertion Loss ( dB Max. )	Attenuation Accuracy ( ±dB )	Power ( W )	Connectors
	( GHz )						
QSA06D-2.5-71-Y-N	DC~2.5	0~71/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (71dB)	2, 10	N
QSA06D-3-71-Y-N	DC~3		1.6	1.7			
QSA06D-4.3-71-Y-N	DC~4.3		1.7	2			
QSA06D-6-71-Y-N	DC~6		1.75	2.5			
QSA06D-2.5-101-Y-N	DC~2.5	0~101/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (61~70dB), ±3.5% (70~101dB)	2, 10	N
QSA06D-3-101-Y-N	DC~3		1.6	1.7			

## Description

The continuously variable attenuators can adjust the power level of microwave circuit continuously in a certain frequency range.

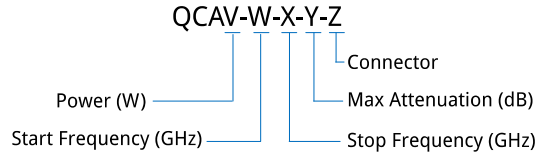


## Features:

- \* Low VSWR
- \* High Attenuation Flatness

## Applications:

- \* Wireless
- \* Radar
- \* Laboratory Test



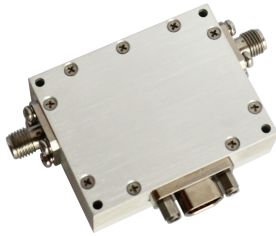
**Examples:** Continuously variable attenuator, 75W, 2.9~3.1GHz, 0~10dB attenuation, N, specify QCA75-2.9-3.1-10-N.

Part Number	Freq (GHz)	Attenuation Range (dB)	Power (W)	Connector	Size (mm)
QCA1-0-2.5-10-N	DC~2.5	0~10	1	N	47.5*42*20
QCA1-0-2.5-16-N		0~16			
QCA1-0-2.5-10-S		0~10		SMA	41*38*20
QCA1-0-2.5-16-S		0~16			
QCA10-0.5-4-15-N	0.5~4	0~15	10	N	186*72*19
QCA50-W-X-10-N	0.9~4	0~10	50	N	120*96.5*75
QCA75-W-X-10-N	0.9~4	0~10	75	N	134.4*98*75
QCA75-W-X-15-N		0~15			
QCAK1-W-X-10-N	0.9~10.5	0~10	100	N	190*102*75
QCAK1-W-X-12-N		0~12			
QCAK1-W-X-15-N		0~15			
QCAK1-W-X-20-N		0~20			
QCAK3-W-X-10-N	0.9~10.5	0~10	300	N	259*102*75
QCAK3-W-X-12-N		0~12			
QCAK3-W-X-15-N		0~15			
QCAK3-W-X-25-N		0~25			
QCA10-2-18-40-N	2~18	0~40	10	N	186*72*21

\*PS: Above W&X represents Freq. Range, only have 100MHz、200MHz bandwidth

## Description

Digitally controlled attenuators control electronic switches at all levels by programming.



## Features:

- \* Broadband
- \* High Dynamic Range

## Applications:

- \* Wireless
- \* Radar
- \* Laboratory Test

QDA-W-X-Y-Z

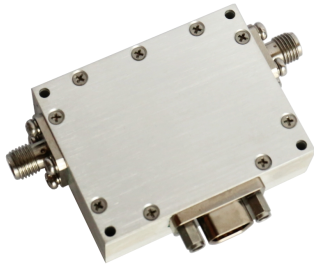


**Examples:** Digitally controlled attenuator, 2.9~3.1GHz, 0~50dB attenuation, 1dB step, SMA female, specify QDA-2900-3100-50-1.

Part Number	Freq. (GHz)	Attenuation (dB)	Step (dB)	Control Digit (Bit)	Accuracy (dB typ.)	IL (dB typ.)	VSWR (typ.)	Input Power (dBm max.)	Connector
QDA-0.9-40000-31-0.5	0.0009~40	0~31	0.5	6	1	4.5	2	25	2.92mm
QDA-100-6000-32.2-0.25	0.1~6	0~32.2	0.25	7	1	1.5	2	25	SMA
QDA-100-40000-31-1	0.1~40	0~31	1	5	2	6.4	2	25	2.92mm
QDA-108-400-31-1	0.108~0.4	0~31	1	5	±1%	1.2	1.5	30	SMA
QDA-300-600-31-1	0.3~0.6	0~31	1	5	±3%	1.5	1.5	25	SMA
QDA-960-1300-31-1	0.96~1.3	0~31	1	5	±3%	1.5	1.5	30	SMA
QDA-960-1300-63-1	0.96~1.3	0~63	1	7	±3%	3.4	1.2	30	SMA
QDA-960-1300-70-10	0.96~1.3	0~70	10	4	±3%	3.5	1.2	30	SMA
QDA-2200-8000-31.5-0.5	2.2~8	0~31.5	0.5	6	±3%	5.5	2.2	27	SMA

### Description

Voltage controlled attenuator can continuously adjust the power level of microwave circuit in a certain frequency range.

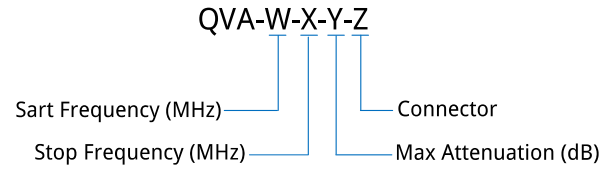


### Features:

- \* Low VSWR
- \* High Attenuation Flatness

### Applications:

- \* Wireless
- \* Radar
- \* Laboratory Test



**Examples:** Voltage controlled attenuator, 2.9~3.1GHz, 0~50dB attenuation, SMA female, specify QVA-2900-3100-50-S.

Part Number	Freq. (GHz)	Attenuation (dB)	Flatness (±dB)	Control Voltage (V)	IL (dB typ.)	VSWR (typ.)	Input Power (dBm max.)	Connectors
QVA-0-18000-30-S	DC~18	0~30	2	0~5	2.8	2	18	SMA
QVA-230-290-30-S	0.23~0.29	0~30	1	0~5	3	2	-	SMA
QVA-5000-30000-33-K	5~30	3~33	2	-5~0	2.5	2	30	2.92mm
QVA-10000-40000-33-K	10~40	3~33	2	-5~0	2.9	2	30	2.92mm



## Description

Coaxial Termination is also called Coaxial Load, used to absorb all the microwave energy from transmission line and improve the matching performance of the circuit. It is usually connected to the terminal of the circuit.

**Features:** Broadband, Low VSWR, High Power.

**Applications:** Transmitters, Antennas, Laboratory Test, Impedance Matching.

QCTW-X-Y



## 0.5W

Part Number	Freq. Range (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT33R5-33-3	DC~33	0.5	1.25	3.5mm	L: 12/11.9
QCT40R5-40-K	DC~40		1.25	2.92mm	L: 12/11.9
QCT40R5-40-A			1.30	SSMA	L: 10.9/9.9
QCT40R5-40-P			1.40	SMP	Φ4.8*9.9/Φ4.8*9.4
QCT40R5-40-G			1.50	SSMP	Φ4.8*10.8/Φ4.8*10
QCT50R5-50-2			DC~50	1.40	2.4mm
QCT67R5-67-V	DC~67		1.45	1.85mm	Φ9.3*16.1/Φ7*16.7



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number

\*Temperature: -55~+125°C

## 1W

Part Number	Freq. Range (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT1801-18-S	DC~18	1	1.25	SMA male	14.9*Φ6.3
QCT1801-18-A				SSMA male	16*Φ6.3
QCT11001-110-1	DC~110		1.6	1.0mm male	9.7*Φ6/9.4*Φ5



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number

\*Temperature: -45~+85°C

## 5W

Part Number	Freq. (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female	
QCT1805-4-N	DC~4	5	1.20	N	Φ16.5*36/-	
QCT1805-8-N	DC~8		1.25			
QCT1805-12.4-N	DC~12.4		1.30			
QCT1805-18-N	DC~18		1.40			
QCT1805-4-S	DC~4		1.15	SMA	Φ19*20/-	
QCT1805-8-S	DC~8		1.20			
QCT1805-12.4-S	DC~12.4		1.25			
QCT1805-18-S	DC~18		1.30	SMA	Φ15.8*28.4/Φ15.8*28.1	
QCT2605-26.5-S	DC~26.5		1.25			
QCT2605-26.5-3	DC~26.5		1.20			3.5mm
QCT4005-40-K	DC~40	1.25	2.92mm			Φ15.8*29.6/Φ15.8*27.8
QCT5005-50-2	DC~50	1.30	2.4mm			Φ31.8*17.8
QCT6705-67-V	DC~67	1.35	1.85mm	Φ31.8*17.8		



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number

\*Temperature: -55~+85°C

## 2W

Part Number	Freq. Range (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT1802-4-N	DC~4	2	1.20	N	Φ16.5*30/Φ16.5*28 L: 25.8/23.6
QCT1802-8-N	DC~8		1.25		
QCT1802-12.4-N	DC~12.4		1.30		
QCT1802-18-N	DC~18		1.20		
QCT1802-4-T	DC~4		1.20	TNC	Φ25*68/Φ12.7*24
QCT1802-8-T	DC~8		1.25		
QCT1802-12.4-T	DC~12.4		1.35		
QCT1802-18-T	DC~18		1.40		
QCT1802-4-A	DC~4		1.15	SSMA	Φ9*22.5/Φ9*21
QCT1802-8-A	DC~8		1.20		
QCT1802-12.4-A	DC~12.4		1.25		
QCT1802-18-A	DC~18		1.30		
QCT2602-26.5-S	DC~26.5		1.20	SMA	Φ9*20/Φ9*19.5
QCT3302-33-3	DC~33		1.15	3.5mm	L: 12/11.9
QCT4002-40-K	DC~40		1.20	2.92mm	L: 12.8/12.7
QCT4002-40-A			1.30	SSMA	L: 10.9/9.9
QCT4002-40-P		1.40	SMP	Φ4.8*9.9/Φ4.8*9.4	
QCT4002-40-G		1.50	SSMP	Φ4.8*10.8/Φ4.8*10	
QCT5002-50-2	DC~50	1.25	2.4mm	L: 12.4/13	
QCT6702-67-V	DC~67	1.30	1.85mm	Φ6.4*11.9/Φ6.4*13.6	



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+125°C

## 10W

Part Number	Freq. (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT1810-4-N	DC~4	10	1.20	N	Φ20*51/-
QCT1810-8-N	DC~8		1.25		
QCT1810-12.4-N	DC~12.4		1.35		
QCT1810-18-N	DC~18		1.40		
QCT1810-4-S	DC~4		1.20	SMA	Φ15.8*39.5/-
QCT1810-8-S	DC~8		1.25		
QCT1810-12.4-S	DC~12.4		1.35		
QCT1810-18-S	DC~18		1.40		
QCT2610-26.5-S	DC~26.5		1.30	SMA	Φ16.5*39.5/Φ16.5*41
QCT2610-26.5-3	DC~26.5		1.25	3.5mm	Φ16.5*38.7/Φ16.5*40.2
QCT4010-40-K	DC~40	1.35	2.92mm	Φ50.8*44.5/-	



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+85°C

## 20W

Part Number	Freq. (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm)
					male / female
QCT1820-4-N	DC~4	20	1.20	N	-
QCT1820-8-N	DC~8		1.25		
QCT1820-12.4-N	DC~12.4		1.35		
QCT1820-18-N	DC~18		1.40		
QCT1820-4-S	DC~4		1.20	SMA	Φ38*39.5/-
QCT1820-8-S	DC~8		1.25		
QCT1820-12.4-S	DC~12.4		1.35		
QCT1820-18-S	DC~18		1.40		
QCT2620-26.5-S	DC~26.5		1.30	SMA	Φ44*45.4/Φ44*44.1
QCT4020-40-K	DC~40		1.30	2.92mm	Φ44*45.6/Φ44*43.8

\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+85°C



## 30W

Part Number	Freq. (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm)
					male / female
QCT2630-26.5-S	DC~26.5	30	1.30	SMA	Φ54*52.4/Φ54*52.1
QCT4030-40-K	DC~40		1.30	2.92mm	Φ54*53.6/Φ54*51.8

\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+125°C



## 50W

Part Number	Freq. Range (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm)
					male / female
QCT1850-4-N	DC~4	50	1.20	N	Φ64*90/Φ64*85
QCT1850-8-N	DC~8		1.25		
QCT1850-12.4-N	DC~12.4		1.35		
QCT1850-18-N	DC~18		1.40		
QCT1850-4-T	DC~4		1.20	TNC	Φ64*88.5/Φ64*84.5
QCT1850-8-T	DC~8		1.25		
QCT1850-12.4-T	DC~12.4		1.35		
QCT1850-18-T	DC~18		1.40		
QCT1850-4-S	DC~4		1.20	SMA	Φ64*90.5/Φ64*89.5
QCT1850-8-S	DC~8		1.25		
QCT1850-12.4-S	DC~12.4	1.35			
QCT1850-18-S	DC~18	1.40			
QCT2650-26.5-S	DC~26.5	1.30	SMA	Φ54*89.4/Φ54*89.1	
QCT2650-26.5-3	DC~26.5	1.25	3.5mm	Φ63*63.5/Φ63*62.7	
QCT4050-40-K	DC~40	1.35	2.92mm	Φ54*100.6/Φ54*98.8	

\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+85°C



## 100W

Part Number	Freq. (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT18K1-4-N	DC~4	100	1.15	N	Φ64*141/Φ64*136
QCT18K1-8-N	DC~8		1.20		
QCT18K1-12.4-N	DC~12.4		1.25		
QCT18K1-18-N	DC~18		1.35		
QCT18K1-4-S	DC~4		1.15	SMA	Φ64*141/Φ64*140.5
QCT18K1-8-S	DC~8		1.20		
QCT18K1-12.4-S	DC~12.4		1.25		
QCT18K1-18-S	DC~18		1.35		
QCT26K1-26.5-S	DC~26.5		1.40	SMA	Φ63*119.2/-



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+85°C

## 150 ~ 500W

Part Number	Freq. Range (GHz)	Avg. Power (W@25°C)	VSWR (max.)	Connector	Size (mm) male / female
QCT18K15-4-N	DC~4	150	1.20	N	192*120*110/-
QCT18K15-8-N	DC~8		1.25		
QCT18K15-12.4-N	DC~12.4		1.35		
QCT18K15-18-N	DC~18		1.45		
QCT18K2-4-N	DC~4	200	1.20	N	243*110*120/-
QCT18K2-8-N	DC~8		1.25		
QCT18K2-12.4-N	DC~12.4		1.35		
QCT18K2-18-N	DC~18		1.40		
QCT18K25-4-N	DC~4	250	1.20	N	294*110*120/-
QCT18K25-8-N	DC~8		1.25		
QCT18K25-12.4-N	DC~12.4		1.35		
QCT18K25-18-N	DC~18		1.45		
QCT18K3-4-N	DC~4	300	1.20	N	345*120*110/340*120*110
QCT18K3-8-N	DC~8		1.25		
QCT18K3-12.4-N	DC~12.4		1.35		
QCT18K3-18-N	DC~18		1.45		
QCT18K5-4-N	DC~4	500	1.20	N	549*120*110/-
QCT18K5-8-N	DC~8		1.25		
QCT18K5-12.4-N	DC~12.4		1.35		
QCT18K5-18-N	DC~18		1.60		
QCT18K5-4-7	DC~4	500	1.2	7/16 DIN	553*120*110/-
QCT18K5-6-7	DC~6		1.25		
QCT18K6-4-N	DC~4	600	1.20	N	549*120*110/544*120*110
QCT18K6-8-N	DC~8		1.25		
QCT18K6-12.4-N	DC~12.4		1.35		
QCT18K6-18-N	DC~18		1.45		



\*PS: The default polarity of each connector is male, if you need female connector, please add 'F' after each connector in the Part Number  
 \*Temperature: -55~+125°C



## QMSDUV-F-WXYZ



### Features:

- \* DC~40GHz
- \* High Power
- \* 1M Cycles

### Applications:

- \* Test Systems
- \* Radar
- \* Instrumentation

### Naming Rules

D: DPDT and 2P3T switch reserved, the others are default

U: 2~18(SP2T~SP18T)

V: RF Connectors: SC (E), TNC (T), N (N), SMA (S), 2.92mm (K), 2.4mm (2), 1.85mm (V)

W: Actuator Type: Failsafe (0), Latching (1), Normally Open (3)

X: Voltage: +12V (E), +18V (H), +24V (K), +28V (m)

Y: Power Interface: Pin (0), D-Sub (1)

Z: Additional Options: TTL (T), Indicators (I), Extended Temperature (Z), High Power Version (P)

**Examples:** SP4T switch, DC~40GHz, Normally Open, +12V, D-Sub, TTL, Indicators, specify QMS4K-40-3E1TI.

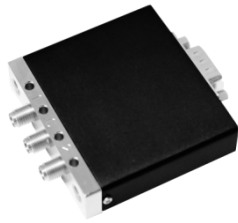
PS: Standard Temperature: -25~+65°C, Extended Temperature: -55~+85°C

Part Number	Switch Type	Freq. (GHz)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Actuator Type	Voltage	RF Connector	Power Interface
QMS2E-6-WXYZ	SPDT	DC~2	0.2	70	1.15	Failsafe	+12V, +18V	SC	Pin
		DC~4	0.3	60	1.3	Latching	+24V, +28V		D-Sub
		DC~6	0.5	60	1.5				
QMS2N-12.4-WXYZ	SPDT	DC~2	0.2	80	1.15	Failsafe	+12V, +18V	N	Pin
		DC~4	0.25	80	1.2	Latching	+24V, +28V		D-Sub
		DC~12.4	0.5	60	1.5				
QMS2S-18-WXYZ	SPDT	DC~6	0.2	70	1.2	Failsafe	+12V, +18	SMA	Pin
		DC~12	0.25	70	1.3	Latching	+24V, +28V		D-Sub
		DC~18	0.4	60	1.4				
QMS2S-20-WXYZ		DC~20	0.5	60	1.5				
QMS2K-26.5-WXYZ	SPDT	DC~26.5	0.7	55	1.7	Failsafe	+12V, +18V	2.92mm	Pin
QMS2K-40-WXYZ		DC~40	1.0	50	2.0	Latching	+24V, +28V		D-Sub
QMS22-50-WXYZ	SPDT	DC~50	0.9	45	1.9	Failsafe	+12V	2.4mm	Pin
						Latching	+24V, +28V		
QMSD2N-12.4-WXYZ	DPDT	DC~2	0.2	80	1.15	Failsafe	+12V, +18V	N	Pin
		DC~4	0.25	70	1.2	Latching	+24V, +28V		D-Sub
		DC~12.4	0.5	50	1.5				
QMSD2S-18-WXYZ	DPDT	DC~6	0.2	70	1.3	Failsafe	+12V, +18V	SMA	Pin
		DC~12	0.25	70	1.4	Latching	+24V, +28V		D-Sub
		DC~18	0.4	60	1.5				

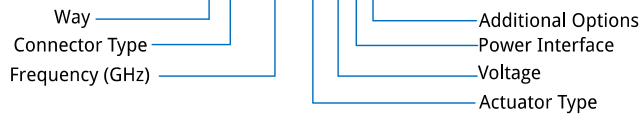
\*PS: Coaxial switches power curve please refer to appendi

Part Number	Switch Type	Freq. (GHz)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Actuator Type	Voltage	RF Connector	Power Interface	
QMSD2K-26.5-WXYZ	DPDT	DC~26.5	0.9	55	1.7	Failsafe	+12V, +18V	2.92mm	Pin	
QMSD2K-40-WXYZ		DC~40	1.3	50	2.0	Latching	+24V, +28V		D-Sub	
QMSD3S-18-WXYZ	2P3T	DC~6	0.2	70	1.2	Failsafe	+12V, +18V	SMA	Pin	
		DC~12	0.25	70	1.3	Latching	+24V, +28V		D-Sub	
		DC~18	0.4	60	1.4					
QMSD3K-26.5-WXYZ	2P3T	DC~26.5	0.7	55	1.7	Failsafe	+12V, +18V	2.92mm	Pin	
QMSD3K-40-WXYZ		DC~40	1.0	50	2.0	Latching	+24V, +28V		D-Sub	
QMSUV-12.4-3X1Z	SP3T~SP6T	DC~4	0.3	70	1.25	Normally Open	+12V, +18V	N	D-Sub	
		DC~8	0.4	60	1.45		+24V, +28V			SC
		DC~12.4	0.7	55	1.7		TNC			
QMSUS-18-3X1Z	SP3T~SP6T	DC~6	0.3	70	1.3	Normally Open	+12V, +18V	SMA	D-Sub	
		DC~12	0.4	60	1.4		+24V, +28V			
		DC~18	0.5	60	1.5					
QMS4S-20-3X1Z	SP4T	DC~20	0.6	60	1.6	Normally Open	+12V, +18V	SMA	D-Sub	
QMS6S-20-3X1Z	SP6T						+24V, +28V			
QMSUK-26.5-3X1Z	SP3T~SP6T	DC~26.5	0.8	50	1.9	Normally Open	+12V, +18V	2.92mm	D-Sub	
QMSUK-40-3X1Z		DC~40	1.0	50	2.0		+24V, +28V			
QMSUS-4-3X1Z	SP7T~SP18T	DC~4	0.25	70	1.25	Normally Open	+12V, +18V +24V, +28V	SMA	D-Sub	
QMSUSD-12.4-3X1Z	SP7T~SP12T	DC~8	0.4	65	1.4	Normally Open	+12V, +18V	SMA	D-Sub	
		DC~12.4	0.6	60	1.5		+24V, +28V			
QMSUS-16-3X1Z	SP11T~SP12T	DC~16	0.6	60	1.6	Normally Open	+12V, +18V +24V, +28V	SMA	D-Sub	
QMSUS-18-3X1Z	SP7T~SP10T	DC~18	0.8	55	1.6	Normally Open	+12V, +18V +24V, +28V	SMA	D-Sub	
QMSUK-26.5-3X1Z	SP7T~SP10T	DC~26.5	0.8	55	1.9	Normally Open	+12V, +18V +24V, +28V	2.92mm	D-Sub	

\*PS: Coaxial switches power curve please refer to appendix.



## QMSUVT-F-WXYZ



**Examples:** SP4T terminated switch, DC~40GHz, Normally Open, +12V, D-Sub, TTL, Indicators, specify QMS4KT-40-3E1TI.

### Features:

- \* DC~40GHz
- \* High Power
- \* 1M Cycles

### Applications:

- \* Test Systems
- \* Radar
- \* Instrumentation

### Naming Rules

U: 2~12 (SP2T ~ SP12T)

V: RF Connectors: SMA (S), 2.92mm (K)

W: Actuator Type: Failsafe (0), Latching (1), Normally Open (3)

X: Voltage: +12V (E), +18V (H), +24V (K), +28V (m)

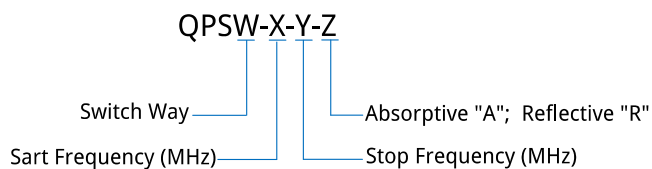
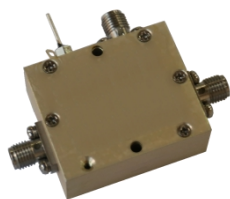
Y: Power Interface: Pin (0), D-Sub (1)

Z: Additional Options: TTL (T), Indicators (I), Extended Temperature (Z), High Power Version (P)

PS: Standard Temperature: -25~+65°C, Extended Temperature: -55~+85°C

Part Number	Switch Type	Freq. (GHz)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Actuator Type	Voltage	RF Connector	Power Interface
QMS2ST-18-WXYZ	SPDT	DC~6	0.2	70	1.2	Failsafe	+12V, +18V	SMA	Pin
		DC~12	0.25	70	1.3				
		DC~18	0.4	60	1.4				
QMS2ST-20-WXYZ		DC~20	0.5	60	1.5	Latching	+24V, +28V		D-Sub
QMS2KT-26.5-WXYZ	SPDT	DC~26.5	0.7	55	1.7	Failsafe	+12V, +18V	2.92mm	Pin
QMS2KT-40-WXYZ		DC~40	1.0	50	2.0	Latching	+24V, +28V		D-Sub
QMSUST-18-WX1Z	SP3T~SP6T	DC~6	0.3	80	1.3	Latching	+12V, +18V	SMA	D-Sub
		DC~12	0.4	70	1.4	Normally Open	+24V, +28V		
		DC~18	0.5	60	1.5				
QMS4ST-20-WX1Z	SP4T	DC~20	0.6	60	1.6	Latching	+12V, +18V	SMA	D-Sub
QMS6ST-20-WX1Z	SP6T					Normally Open	+24V, +28V		
QMSUKT-26.5-WX1Z	SP3T~SP6T	DC~26.5	0.8	50	1.9	Latching	+12V, +18V	2.92mm	D-Sub
QMSUKT-40-WX1Z		DC~40	1.0	50	2.0	Normally Open	+24V, +28V		
QMSUST-18-WX1Z	SP7T~SP12T	DC~6	0.3	70	1.3	Latching	+12V, +18V	SMA	D-Sub
		DC~12	0.6	60	1.5	Normally Open	+24V, +28V		
		DC~18	0.8	60	1.8				
QMSUKT-26.5-WX1Z	SP7T~SP10T	DC~26.5	0.9	50	1.9	Latching	+12V, +18V	2.92mm	D-Sub
						Normally Open	+24V, +28V		

\*PS: Coaxial switches power curve please refer to appendix.


**Features:**

\* DC~40GHz

**Applications:**

- \* Test Systems
- \* Radar
- \* Instrumentation

**Examples:** SPDT switches, DC~40GHz, reflective, specify QPS2-0-40000-R.

Part Number	Type	Way	Freq. (GHz)	Switch Time (nS)	IL (dB, typ)	Isolation (dB, typ.)	VSWR (typ.)	Input Power (dBm, max.)	Connectors
QPS2-0-6000-A	Absorptive	SPDT	DC~6	10	2.2	56	1.2	24	SMA
QPS2-0-40000-R	Reflective	SPDT	DC~40	4	2.3	36	2	25	2.92mm
QPS2-0.9-44000-A	Absorptive	SPDT	0.0009~44	10000	2.2	48	1.2	20	2.92mm
QPS2-0.95-200-R	Reflective	SPDT	0.00095~0.	100	1	40	1.5	38	SMA
QPS2-5-6000-R	Reflective	SPDT	0.005~6	1900	1.25	33	1.4	37	SMA
QPS3-0-18000-A	Absorptive	SP3T	DC~18	66	2	42	2	27	SMA
QPS4-0-20000-A	Absorptive	SP4T	DC~20	100	1.8	35	2	27	SMA
QPS4-0.9-44000-A	Absorptive	SP4T	0.0009~44	100	2.4	39	2	25	2.92mm
QPS5-0-18000-A	Absorptive	SP5T	DC~18	60	2.5	44	2	27	SMA
QPS6-0-18000-A	Absorptive	SP6T	DC~18	60	2.5	44	2	27	SMA




**Features:**

- \* Low Insertion Loss
- \* High Isolation

**Applications:**

- \* Wireless
- \* Transmitter
- \* Laboratory Test
- \* Radar

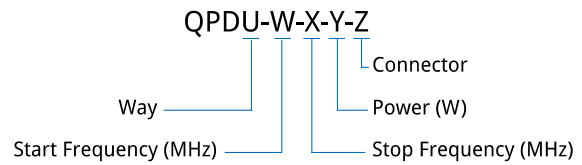
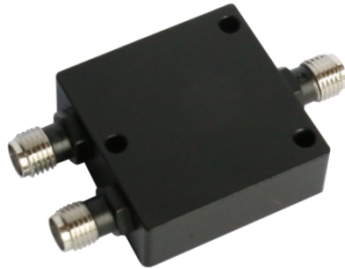
Part Number	Frequency (GHz)	IL (dB)	Isolation (dB)	VSWR (Max.)	Voltage (V AC)	Description
QMSM-0-6-2-2	DC-6	1.2	70	1.4	220	2*2, Non-blocking
QMSM-0-6-4-4	DC-6	1.8	70	1.6	220	4*4, Non-blocking
QMSM-0-6-6-6	DC-6	1.8	70	1.6	220	6*6, Non-blocking
QMSM-0-6-8-8	DC-6	2	70	1.6	220	8*8, Non-blocking
QMSM-0-12-2-2	DC-12.4	1.8	60	1.6	220	2*2, Non-blocking
QMSM-0-12-4-4	DC-12.4	2	60	1.8	220	4*4, Non-blocking
QMSM-0-12-6-6	DC-12.4	2.5	60	1.8	220	6*6, Non-blocking
QMSM-0-12-8-8	DC-12.4	3	60	1.8	220	8*8, Non-blocking
QMSM-0-18-2-2	DC-18	2	60	1.8	220	2*2, Non-blocking
QMSM-0-18-4-4	DC-18	4	60	2	220	4*4, Non-blocking
QMSM-0-18-6-6	DC-18	5	70	1.4	220	6*6, Non-blocking
QMSM-0-18-8-8	DC-18	5	50	2	220	8*8, Non-blocking
QMSM-0-40-2-2	DC-40	3	40	3	220	2*2, Non-blocking
QMSM-0-40-4-4	DC-40	4	40	3	220	4*4, Non-blocking

### Description

Power divider is a kind of device that divides one input signal into two or more channels with equal amplitude and phase. It can also combine multiple signal into one channel, which is also called combiner.

The electrical specifications include frequency range, Power Handling, insertion loss, isolation, VSWR, etc.

**Features:** Broadband, High Reliability, Low Insertion; **Applications:** Amplifiers, Mixers, Antennas and Laboratory etc.



### Environmental

Operation Temperature: -35~+75°C

Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD2-0-2000-2-S	DC~2	2	6.0±0.5	6	0.5	-	1.2	SMA	28*28*10
QPD2-0-2400-2-S	DC~2.4	2	6.0±0.5	6	0.5	-	1.2	SMA	28*24.2*13.5
QPD2-0-3000-2-S	DC~3	2	6.8	5.6	0.3	3	1.2	SMA	28*28*10
QPD2-0-3000-2-N	DC~3	2	6.8	5.6	0.3	3	1.2	N	38*32*20
QPD2-0-4000-2-S	DC~4	2	6.8	5.6	0.3	3	1.2	SMA	28*28*10
QPD2-0-6000-2-S	DC~6	2	6.8	5.6	0.3	3	1.3	SMA	28*28*10
QPD2-0-6000-2-N	DC~6	2	6.8	5.6	0.3	3	1.3	N	38*32*20
QPD2-0-8000-2-S	DC~8	2	7.2±0.5	6	0.5	-	1.4	SMA	25.4*22.2*16
QPD2-0-10000-R5-S	DC~10	0.5	6.0±1.5	-	0.8	-	1.5	SMA	28*24.2*12
QPD2-0-12400-R5-S	DC~12.4	0.5	6±1.5	-	0.8	-	1.5	SMA	28*24.2*12
QPD2-0-18000-R5-S	DC~18	0.5	6±1.5	-	0.8	-	1.6	SMA	28*12*24.2
QPD2-0-26500-2-S	DC~26.5	2	7.5	8	0.4	3	2.5	SMA	19.1*16.6*10
QPD2-0-40000-2-K	DC~40	2	7.5	9	0.5	5	2.5	2.92mm	17.5*15.8*10
QPD2-0-50000-1-2	DC~50	1	7.8	9	0.8	8	2.5	2.4mm	17.5*15.8*10
QPD2-0-67000-1-V	DC~67	1	8	9	0.9	10	2.5	1.85mm	17.5*15.8*10
QPD2-0.2-2-10-S	0.0002~0.002	10	0.5	20	0.2	2	1.3	SMA	31.95*31.75*19
QPD2-2-500-1-S	0.002~0.5	1	0.6	20	0.3	2	1.3	SMA	28*28*12.7
QPD2-5-1000-1-S	0.005~1	1	1.0	18	0.3	3	1.3	SMA	28*28*12.7
QPD2-5-1000-1-N	0.005~1	1	1.0	17	0.3	3	1.25	N	56*34*22
QPD2-5-1000-1-B	0.005~1	1	1.0	17	0.3	3	1.25	BNC	56*34*22
QPD2-10-500-K1-S	0.01~0.5	100	0.9	15	0.2	5	1.6	SMA	60*80*22
QPD2-10-1000-1-S	0.01~1	1	1.0	20	0.3	3	1.3	SMA	28*28*12.7
QPD2-30-300-2-N	0.03~0.3	2	6.8	5.6	0.3	3	1.2	N	38*32*20
QPD2-30-400-20-S	0.03~0.4	20	1.8	20	0.2	2	1.2	SMA	250*80*12
QPD2-30-406-K5-S	0.03~0.406	500	0.5	20	0.1	3	1.35	SMA	60*80*22
QPD2-30-512-K3-N	0.03~0.512	300	1.4	20	0.2	2	1.25	N	295*224*22
QPD2-30-512-30-S	0.03~0.512	30	2.8	20	0.3	3	1.25	SMA	-
QPD2-30-1000-20-S	0.03~1	20	2.5	20	0.3	3	1.3	SMA	140*110*10
QPD2-30-1000-20-N	0.03~1	20	2.8	20	0.3	3	1.3	N	140*110*20
QPD2-30-3000-2-N	0.03~3	2	6.8	5.6	0.3	-	1.2	N	38*32*20

\*Size: Exclude connectors

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD2-30-3000-2-S	0.03~3	2	6.8	5.6	0.3	3	1.2	SMA	28*28*10
QPD2-50-500-1-S	0.05~0.5	1	0.6	18	0.3	3	1.3	SMA	36*34*12
QPD2-50-500-1-N	0.05~0.5	1	0.5	20	0.3	3	1.2	N	60*42*22
QPD2-52-57-K6-N	0.052~0.057	600	0.3	20	0.2	3	1.25	N	274*170*22
QPD2-68-72-1-N	0.068~0.072	1	0.3	20	0.2	2	1.2	N	56*34*22
QPD2-68-72-30-N	0.068~0.072	30	0.4	20	0.2	2	1.2	N	106*82*22
QPD2-68-72-K2-N	0.068~0.072	200	0.3	20	0.2	2	1.2	N	283*110*22
QPD2-70-2700-K1-N	0.07~2.7	100	2.0	20	0.2	3	1.5	N	334*60*20
QPD2-70-4200-20-S	0.07~4.2	20	5.0	18	0.3	3	1.5	SMA	260*42*12
QPD2-80-110-30-S	0.08~0.11	30	0.4	20	0.2	2	1.2	SMA	108*70*10
QPD2-80-500-30-S	0.08~0.5	30	0.8	19	0.2	2	1.25	SMA	110*62*12
QPD2-80-2000-30-S	0.08~2	30	1.8	19	0.2	2	1.25	SMA	110*62*12
QPD2-80-2000-30-N	0.08~2	30	1.8	20	0.2	2	1.25	N	110*62*20
QPD2-80-4000-30-S	0.08~4	30	2.5	16	0.3	3	1.5	SMA	156*44*12
QPD2-100-200-K1-N	0.1~0.2	100	0.3	20	0.2	2	1.2	N	168*90*22
QPD2-100-350-30-S	0.1~0.35	30	1.0	20	$\pm$ 0.2	2	1.25	SMA	98*70*14
QPD2-100-400-30-N	0.1~0.4	30	1.0	22	0.2	2	1.2	N	98*72*20
QPD2-100-400-K2-N	0.1~0.4	200	0.4	20	0.2	2	1.2	N	195*102*22
QPD2-100-500-50-S	0.1~0.5	50	0.5	20	0.2	3	1.25	SMA	130*80*14
QPD2-100-500-50-N	0.1~0.5	50	0.5	20	0.2	2	1.25	N	132*84*22
QPD2-100-500-K3-N-20	0.1~0.5	300	0.5	20	0.2	2	1.25	N	262*84*22
QPD2-100-500-K3-N-K1	0.1~0.5	300	0.5	20	0.2	2	1.25	N	262*84*24
QPD2-100-500-K4-7	0.1~0.5	400	0.6	20	0.2	2	1.25	7/16DIN	260*88*35
QPD2-100-512-30-N	0.1~0.512	30	0.7	23	0.2	2	1.3	N	98*60*22
QPD2-100-550-K1-N	0.1~0.55	100	0.5	20	0.2	2	1.2	N	226*80*22
QPD2-100-600-30-S	0.1~0.6	30	0.8	20	0.2	2	1.2	SMA	85*70*12
QPD2-100-1000-30-S	0.1~1	30	1.2	20	0.2	2	1.2	SMA	110*62*12
QPD2-100-3000-30-S	0.1~3	30	2.5	18	0.3	3	1.3	SMA	122*50*12
QPD2-100-4000-30-S	0.1~4	30	2.0	16	0.3	3	1.4	SMA	120*40*12
QPD2-134-3700-30-N	0.134~3.7	30	2.2	18	0.3	3	1.3	N	111*50*20
QPD2-136-174-K3-N	0.136~0.174	300	0.3	20	0.2	2	1.2	N	226*90*22
QPD2-138-960-50-N	0.138~0.96	50	0.6	18	$\pm$ 0.2	3	1.25	N	150*58*20
QPD2-150-980-50-N	0.15~0.98	50	0.6	20	0.3	3	1.3	N	150*78*20
QPD2-200-1000-30-S	0.2~1	30	0.6	20	0.2	2	1.25	SMA	82*48*12
QPD2-200-2000-30-S	0.2~2	30	0.8	20	0.2	3	1.25	SMA	85*44*12
QPD2-200-6000-30-S	0.2~6	30	2.2	18	0.3	3	1.25	SMA	123*38*12
QPD2-200-6000-30-N	0.2~6	30	2.2	18	0.3	3	1.25	N	123*46*20
QPD2-200-6000-50-S	0.2~6	50	6.0	18	0.2	3	1.4	SMA	290*44*15
QPD2-210-240-50-N	0.21~0.24	50	0.3	20	0.2	2	1.2	N	84*76*20
QPD2-225-512-K1-N	0.225~0.512	100	0.3	20	0.2	2	1.2	N	134*80*22
QPD2-300-500-50-S	0.3~0.5	50	0.3	20	0.2	2	1.2	SMA	85*50*14
QPD2-300-600-30-S	0.3~0.6	30	0.4	20	0.2	2	1.2	SMA	53*52*12

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD2-300-600-50-N	0.3~0.6	50	0.3	20	0.2	2	1.2	N	85*50*20
QPD2-300-900-30-S	0.3~0.9	30	0.6	20	0.2	2	1.2	SMA	82*48*12
QPD2-300-1000-20-S	0.3~1	20	0.6	20	0.2	2	1.2	SMA	60*50*12
QPD2-300-1000-20-N	0.3~1	20	0.8	20	0.2	2	1.25	N	60*50*20
QPD2-300-1000-K3-N	0.3~1	300	0.3	20	0.2	2	1.25	N	195*56*20
QPD2-300-1800-K3-N	0.3~1.8	300	0.6	18	0.2	2	1.3	N	110*78*22
QPD2-300-2000-50-N	0.3~2	50	0.8	18	0.2	3	1.3	N	72*70*20
QPD2-336-366-30-N	0.336~0.366	30	0.3	20	0.2	2	1.2	N	80*52*20
QPD2-350-520-K15-N	0.35~0.52	150	0.3	20	0.2	2	1.2	N	90*70*22
QPD2-350-3800-30-S	0.35~3.8	30	1.2	20	0.2	3	1.25	SMA	62*42*12
QPD2-350-3800-30-N	0.35~3.8	30	1.2	20	0.2	3	1.25	N	62*50*20
QPD2-350-6000-30-S	0.35~6	30	1.5	20	0.3	3	1.25	SMA	82*38*12
QPD2-380-410-K3-N	0.38~0.41	300	0.3	20	0.2	2	1.2	N	152*80*22
QPD2-380-460-K1-7	0.38~0.46	100	0.3	20	0.2	2	1.2	7/16DIN	95*78*30
QPD2-380-470-K3-N	0.38~0.47	300	0.3	20	0.2	2	1.2	N	144*80*22
QPD2-380-8000-30-S	0.38~8	30	1.6	18	0.3	3	1.25	SMA	78*28*10
QPD2-400-450-50-K1	0.4~0.45	100	0.4	20	0.2	2	1.2	N	70*68*20
QPD2-400-470-30-S	0.4~0.47	30	0.5	20	0.2	2	1.2	SMA	54*52*12
QPD2-400-1000-K2-N	0.4~1	200	0.4	18	0.2	2	1.25	N	126*58*22
QPD2-400-1000-K3-N	0.4~1	300	0.4	18	0.2	2	1.25	N	126*58*22
QPD2-400-2700-30-S	0.4~2.7	30	0.8	20	0.2	3	1.2	SMA	56*50*12
QPD2-400-6000-30-S	0.4~6	30	1.2	20	0.2	3	1.3	SMA	73*38*12
QPD2-400-6000-30-N	0.4~6	30	1.4	20	0.2	3	1.3	N	73*50*20
QPD2-400-7500-20-S	0.4~7.5	20	1.5	20	0.3	3	1.35	SMA	75*28*10
QPD2-400-8000-30-S	0.4~8	30	1.5	18	0.3	3	1.3	SMA	74*35*12
QPD2-400-18000-20-S	0.4~18	20	1.2	12	0.3	5	1.7	SMA	157*26*10
QPD2-430-950-30-S	0.43~0.95	30	0.3	22	0.2	2	1.2	SMA	84*50*12
QPD2-500-1000-30-S	0.5~1	30	0.3	20	0.2	2	1.2	SMA	56*34*13
QPD2-500-1000-30-N	0.5~1	30	0.4	20	0.2	2	1.2	N	52*41*20
QPD2-500-2000-20-S	0.5~2	20	0.5	20	0.2	2	1.3	SMA	54*28*12
QPD2-500-3000-30-S	0.5~3	30	0.6	22	0.2	3	1.25	SMA	48*40*12
QPD2-500-3000-30-N	0.5~3	30	0.6	20	0.2	3	1.25	N	56*50*20
QPD2-500-4000-30-S	0.5~4	30	0.8	20	0.2	3	1.25	SMA	46*42*12
QPD2-500-6000-30-S	0.5~6	30	1.1	18	0.2	3	1.25	SMA	48*36*12
QPD2-500-6000-30-N	0.5~6	30	1.2	20	0.2	3	1.25	N	56*50*20
QPD2-500-8000-30-S	0.5~8	30	1.5	20	0.2	3	1.25	SMA	74*35*12
QPD2-500-8000-30-N	0.5~8	30	1.8	20	0.2	3	1.25	N	74*38*20
QPD2-500-18000-20-S	0.5~18	20	1.2	16	0.3	5	1.6	SMA	157*26*10
QPD2-500-18000-20-N	0.5~18	20	1.5	16	0.3	5	1.6	N	157*48*20
QPD2-500-26500-20-S	0.5~26.5	20	2.4	17	0.4	4	1.6	SMA	149.2*26.4*12.7
QPD2-500-40000-20-K	0.5~40	20	3.5	16	0.5	6	1.6	2.92mm	149.2*26.4*12.7
QPD2-555-3400-30-N	0.555~3.4	30	0.6	20	±0.2	2	1.2	N	64*54*20

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD2-600-2000-30-S	0.6~2	30	0.4	20	0.2	3	1.2	SMA	48*44*12
QPD2-600-6000-30-S	0.6~6	30	1.0	20	$\pm$ 0.2	2	1.25	SMA	45*36*12
QPD2-600-6000-30-N	0.6~6	30	1.0	20	0.2	3	1.25	N	80*48*20
QPD2-700-2700-30-S	0.7~2.7	30	0.5	20	0.2	2	1.2	SMA	42*38*14
QPD2-700-2700-K2-N	0.7~2.7	200	0.6	18	$\pm$ 0.2	3	1.25	N	82*62*22
QPD2-700-4000-30-S	0.7~4	30	0.6	20	$\pm$ 0.2	3	1.25	SMA	42*40*12
QPD2-700-4000-30-N	0.7~4	30	0.6	20	0.2	3	1.25	N	50*45*20
QPD2-700-4700-30-N	0.7~4.7	30	1.0	20	0.2	3	1.25	N	56*50*20
QPD2-700-5000-30-N	0.7~5	30	1.0	18	0.2	4	1.3	N	70*54*22
QPD2-700-6000-30-S	0.7~6	30	1.0	20	0.2	3	1.25	SMA	45*36*12
QPD2-700-9000-20-S	0.7~9	20	1.2	18	0.2	3	1.25	SMA	55*28*10
QPD2-800-1880-K2-N	0.8~1.88	200	0.3	25	0.2	2	1.25	N	66*68*22
QPD2-800-2500-K2-N	0.8~2.5	200	0.3	20	0.2	3	1.25	N	66*47*22
QPD2-800-2500-K2-7	0.8~2.5	200	0.3	20	0.2	3	1.25	7/16DIN	72*55*28
QPD2-800-2500-30-S	0.8~2.5	30	0.5	20	0.2	2	1.2	SMA	38*42*14
QPD2-800-2700-30-S	0.8~2.7	30	0.5	22	0.2	3	1.2	SMA	35*43*14
QPD2-800-2700-50-N	0.8~2.7	50	0.5	20	0.2	3	1.25	N	45.7*75*18.7
QPD2-800-3000-30-S	0.8~3	30	0.5	20	0.2	3	1.25	SMA	43*35*14
QPD2-800-3000-30-N	0.8~3	30	0.6	20	0.2	3	1.25	N	50*43*20
QPD2-800-3800-K2-7	0.8~3.8	200	0.9	20	0.2	3	1.3	7/16DIN	95*58*30
QPD2-800-4000-30-S	0.8~4	30	0.8	22	0.2	3	1.2	SMA	45*36*12
QPD2-950-2150-30-S	0.95~2.15	30	0.4	20	0.2	2	1.2	SMA	28*27.8*11.1
QPD2-950-2150-30-S-DC	0.95~2.15	30	0.3	20	0.2	2	1.2	SMA	56*46*14
QPD2-950-2150-30-N-DC	0.95~2.15	30	0.3	20	0.2	2	1.2	N	56*46*20.5
QPD2-960-9000-10-S	0.96~9	10	1.2	15	0.6	10	1.6	SMA	99*24*10
QPD2-1000-2000-30-S	1~2	30	0.4	20	0.2	2	1.2	SMA	27.8*28*11.1
QPD2-1000-2000-30-N	1~2	30	0.35	20	0.2	2	1.2	N	43*29*20
QPD2-1000-2500-30-N	1~2.5	30	0.4	20	0.2	2	1.2	N	56*46*20.5
QPD2-1000-3000-30-S	1~3	30	0.5	20	0.2	3	1.2	SMA	43*35*14
QPD2-1000-4000-30-S	1~4	30	0.4	20	0.2	2	1.2	SMA	28*28*10
QPD2-1000-4000-50-S	1~4	50	0.8	20	0.2	3	1.25	SMA	64*40*14
QPD2-1000-4000-K2-N	1~4	200	1.2	16	0.3	4	1.5	N	80*60*24
QPD2-1000-8000-30-S	1~8	30	0.8	20	0.2	3	1.25	SMA	41*28*10
QPD2-1000-9000-30-S	1~9	30	1.4	20	0.2	3	1.25	SMA	52*28*10
QPD2-1000-9000-30-N	1~9	30	1.5	20	0.2	3	1.25	N	52*50*20
QPD2-1000-12000-20-S	1~12	20	1.0	18	0.3	4	1.4	SMA	99*24*10
QPD2-1000-18000-20-S	1~18	20	1.2	16	0.3	3	1.4	SMA	99*24*10
QPD2-1000-26500-20-S	1~26.5	20	1.2	16	0.5	6	1.7	SMA	81*26*10
QPD2-1000-26500-20-K	1~26.5	20	1.2	16	0.5	6	1.7	2.92mm	81*26*10
QPD2-1000-40000-20-K	1~40	20	2.2	15	0.5	8	2	2.92mm	78*26*10
QPD2-1100-1700-30-S	1.1~1.7	30	0.3	20	0.2	2	1.2	SMA	28*28*10
QPD2-1100-1700-30-B	1.1~1.7	30	0.4	20	0.2	2	1.2	BNC	56*46*20.5

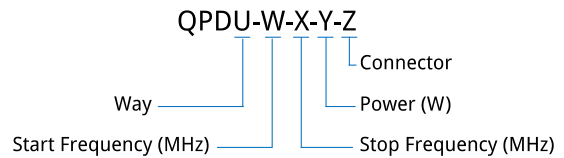
\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD2-1300-2400-30-S	1.3~2.4	30	0.4	22	0.2	2	1.2	SMA	42*28*12
QPD2-1350-1450-20-S	1.35~1.45	20	0.3	30	0.2	2	1.2	SMA	28*28*10
QPD2-1500-18000-20-S	1.5~18	20	1.2	16	0.3	3	1.4	SMA	99*24*10
QPD2-1700-5900-30-N	1.7~5.9	30	0.5	22	0.2	3	1.2	N	38*34*20
QPD2-1700-6000-50-S	1.7~6	50	0.5	18	0.2	2	1.4	SMA	45.5*26.4*12.7
QPD2-1700-9000-30-S	1.7~9	30	0.6	18	0.2	3	1.3	SMA	34*28*10
QPD2-2000-2300-K1-S	2~2.3	100	0.4	20	0.2	2	1.25	SMA	31.95*31.75*19.0
QPD2-2000-2400-30-N	2~2.4	30	0.3	20	0.2	2	1.25	N	43*29*20
QPD2-2000-4000-30-S	2~4	30	0.5	20	0.2	2	1.25	SMA	36*34*12
QPD2-2000-4000-30-N	2~4	30	0.4	20	0.2	2	1.25	N	43*29*20
QPD2-2000-4000-125-N	2~4	125	0.3	20	0.2	3	1.2	N	72*50*20
QPD2-2000-4000-K3-N	2~4	300	0.5	18	0.2	2	1.3	N	70*52*22
QPD2-2000-6000-30-S	2~6	30	0.5	20	0.2	3	1.25	SMA	28*28*10
QPD2-2000-6000-30-N	2~6	30	0.6	20	0.2	3	1.25	N	43*29*20
QPD2-2000-8000-30-S	2~8	30	0.6	20	0.2	3	1.3	SMA	28*28*10
QPD2-2000-8000-30-N	2~8	30	0.8	18	0.2	3	1.3	N	43*29*20
QPD2-2000-9000-30-S	2~9	30	0.6	20	0.2	3	1.25	SMA	34*28*10
QPD2-2000-12000-20-S	2~12	20	1.0	18	0.3	4	1.4	SMA	47*24*10
QPD2-2000-18000-20-S	2~18	20	1.0	18	0.3	4	1.4	SMA	47*24*10
QPD2-2000-40000-20-K	2~40	20	1.6	18	0.2	4	1.6	2.92mm	78*26*10
QPD2-2400-2500-K3-S	2.4~2.5	300	0.3	30	0.2	2	1.25	SMA	70*50*14
QPD2-2400-2500-K2-S	2.4~2.5	200	0.3	30	0.2	2	1.25	SMA	70*50*14
QPD2-2500-4000-K2-N	2.5~4	200	0.6	18	0.2	3	1.35	N	58*52*22
QPD2-3000-6000-30-S	3~6	30	0.4	22	0.2	2	1.2	SMA	28*28*10
QPD2-3000-8000-30-S	3~8	30	0.6	22	0.1	1	1.2	SMA	28*28*10
QPD2-3000-13000-5-S	3~13	5	1.2	18	0.3	5	1.5	SMA	47*24*10
QPD2-3400-3800-30-N	3.4~3.8	30	0.3	20	0.2	2	1.2	N	54*40*20
QPD2-3400-3800-K1-N	3.4~3.8	100	0.3	20	0.2	2	1.2	N	62*54*20
QPD2-4000-5000-30-S	4~5	30	0.4	22	0.2	2	1.25	SMA	28*28*10
QPD2-4000-6000-30-S	4~6	30	0.4	20	0.2	2	1.2	SMA	28*28*10
QPD2-4000-8000-30-S	4~8	30	0.5	20	0.2	2	1.25	SMA	28*28*10
QPD2-4000-8000-30-N	4~8	30	0.5	20	0.2	2	1.25	N	43*29*20
QPD2-4000-12000-20-S	4~12	20	0.8	18	0.2	3	1.25	SMA	38*28*10
QPD2-4900-5900-30-S	4.9~5.9	30	0.4	20	0.2	2	1.25	SMA	36*34*12
QPD2-5000-6000-K2-N	5~6	200	0.5	20	0.2	3	1.25	N	50*36*20
QPD2-5000-12000-20-S	5~12	20	0.6	18	0.3	3	1.25	SMA	28*28*10
QPD2-5150-5850-50-N	5.15~5.85	50	0.5	20	0.2	3	1.25	N	44*36*20
QPD2-5150-5850-K2-N	5.15~5.85	200	0.6	20	0.2	3	1.25	N	52*50*20
QPD2-5200-5900-K1-S	5.2~5.9	100	0.4	20	0.2	2	1.25	SMA	60*45*15
QPD2-5700-5900-30-S	5.7~5.9	30	0.4	22	0.2	2	1.2	SMA	28*28*10
QPD2-6000-18000-20-S	6~18	20	0.8	18	0.3	4	1.4	SMA	30*24*10
QPD2-6000-18000-K1-S	6~18	100	1.0	15	0.3	4	1.4	SMA	35*30*10

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD2-6000-40000-20-K	6~40	20	1.4	16	0.5	5	1.7	2.92mm	26*19*10
QPD2-7000-8500-30-S	7~8.5	30	0.4	20	0.2	2	1.25	SMA	28*28*10
QPD2-7000-9000-30-S	7~9	30	0.3	20	0.2	2	1.25	SMA	28*28*10
QPD2-8000-12000-20-S	8~12	20	0.5	18	0.2	3	1.25	SMA	28*28*10
QPD2-8000-30000-20-K	8~30	20	1.2	16	0.4	4	1.5	2.92mm	26*19*10
QPD2-10000-43000-20-K	10~43	20	1.3	12	0.4	5	1.6	2.92mm	26*19*10
QPD2-10000-43300-20-K	10~43.3	20	1.6	14	0.5	6	1.6	2.92mm	26*19*10
QPD2-10700-12750-20-S	10.7~12.75	20	0.6	18	0.3	3	1.3	SMA	28*28*10
QPD2-12400-13650-20-S	12.4~13.65	20	0.6	18	0.2	3	1.3	SMA	30*24*10
QPD2-13500-15000-20-N	13.5~15	20	0.4	18	0.2	3	1.25	N	43*29*20
QPD2-13500-15000-20-S	13.5~15	20	0.5	20	0.2	3	1.25	SMA	28*28*10
QPD2-17000-31000-20-K	17~31	20	1.0	16	0.4	5	1.5	2.92mm	26*19*10
QPD2-18000-26500-20-K	18~26.5	20	0.6	16	0.4	4	1.5	2.92mm	26*19*10
QPD2-18000-40000-20-K	18~40	20	1.0	16	0.4	5	1.5	2.92mm	26*19*10
QPD2-20000-22000-20-K	20~22	20	1.0	18	0.4	4	1.4	2.92mm	26*19*10
QPD2-20000-40000-20-K	20~40	20	1.2	16	0.4	5	1.5	2.92mm	26*19*10
QPD2-23100-23300-10-K	23.1~23.3	10	0.8	18	0.3	3	1.5	2.92mm	26*19*10
QPD2-24000-43500-20-K	24~43.5	20	1.3	16	0.4	5	1.7	2.92mm	26*19*10
QPD2-24250-52600-20-V	24.25~52.6	20	1.5	17	0.5	5	1.7	1.85mm	25.4*15.2*12.7
QPD2-25500-25600-1-K	25.5~25.6	1	0.8	18	0.3	3	1.5	2.92mm	26*19*10
QPD2-26000-31000-20-K	26~31	20	1.0	16	0.4	4	1.5	2.92mm	26*19*10
QPD2-26000-40000-20-K	26~40	20	1.2	16	0.4	4	1.5	2.92mm	26*19*10
QPD2-27000-52000-10-2	27~52	10	1.8	14	0.6	6	1.8	2.4mm	26*19*10

\*Size: Exclude connectors.



**Environmental**

Operation Temperature: -35~+75°C

Impedance: 50Ω

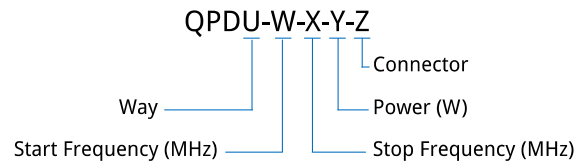
Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD3-0-3000-2-S	DC-3	2	9.5±0.6	9.5	0.6	-	1.25	SMA	25.4*22.2*16
QPD3-0-6000-2-S	DC-6	2	11.0	9	0.7	10	1.4	SMA	29.3*25.4*16
QPD3-0-8000-2-S	DC-8	2	13.4	8.9	0.8	8	1.6	SMA	45*34*12.5
QPD3-5-1000-50-S	0.005~1	50	1	12	0.3	5	1.5	SMA	60*80*22
QPD3-10-500-1-S	0.01~0.5	1	1.4	16	0.6	6	1.6	SMA	60*48*12
QPD3-80-300-20-S	0.08~0.3	20	1.0	18	0.4	5	1.3	SMA	186*102*12
QPD3-100-200-K1-N	0.1~0.2	100	0.5	18	0.3	3	1.25	N	305*120*22
QPD3-100-350-30-S	0.1~0.35	30	0.8	20	0.4	4	1.25	SMA	240*108*14
QPD3-100-400-30-N	0.1~0.4	30	0.6	18	0.5	5	1.3	N	228*108*20
QPD3-100-400-50-N	0.1~0.4	50	0.6	18	0.6	5	1.3	N	228*165*20
QPD3-100-1000-30-S	0.1~1	30	1.8	18	0.8	8	1.35	SMA	186*72*14
QPD3-114-178-K3-N	0.114~0.178	300	1.0	20	0.5	6	1.3	N	280*172*22
QPD3-134-3700-30-N	0.134~3.7	30	3.8	18	0.9	10	1.5	N	280*68*20
QPD3-136-174-K3-N	0.136~0.174	300	0.8	20	0.3	3	1.25	N	326*172*22
QPD3-138-960-50-N	0.138~0.96	50	1.2	18	0.6	6	1.3	N	148*115*20
QPD3-200-250-30-S	0.2~0.25	30	1.0	20	0.4	4	1.25	SMA	164*64*14
QPD3-200-2000-30-S	0.2~2	30	1.8	20	0.8	8	1.3	SMA	143*60*12
QPD3-225-2500-20-S	0.225~2.5	20	1.8	20	0.8	8	1.4	SMA	136*56*12
QPD3-336-366-30-N	0.336~0.366	30	0.6	20	0.3	3	1.25	N	195*74*20
QPD3-380-470-K3-N	0.38~0.47	300	0.8	20	0.3	3	1.25	N	164*155*22
QPD3-380-40000-20-K	0.38~40	20	4.5	17	0.9	10	1.7	2.92mm	254*40.6*12.7
QPD3-400-1000-30-S	0.4~1	30	0.6	20	0.4	5	1.3	SMA	112*90*14
QPD3-400-2000-30-S	0.4~2	30	1.8	20	0.8	10	1.3	SMA	100*70*12
QPD3-400-6000-20-S	0.4~6	20	2.8	18	0.8	8	1.4	SMA	130*50*12
QPD3-400-6000-20-N	0.4~6	20	2.8	18	0.8	8	1.5	N	130*74*20
QPD3-433-30-30-N	0.433	30	0.5	22	0.3	3	1.2	N	100*70*20
QPD3-440-900-60-N	0.44~0.9	60	0.8	18	0.4	6	1.35	N	100*100*20
QPD3-480-500-30-N	0.48~0.5	30	0.3	20	0.3	3	1.2	N	90*78*20
QPD3-480-500-50-N	0.48~0.5	50	0.3	20	0.3	3	1.2	N	100*90*20
QPD3-500-700-K15-S	0.5~0.7	150	0.6	18	0.5	6	1.3	SMA	108*86*14
QPD3-500-3000-30-S	0.5~3	30	1.0	18	0.5	5	1.3	SMA	90*48*12
QPD3-500-6000-30-S	0.5~6	30	2.8	18	0.8	8	1.5	SMA	130*50*12
QPD3-500-6000-30-N	0.5~6	30	2.8	18	0.8	8	1.5	N	130*74*20
QPD3-500-8000-20-S	0.5~8	20	2.2	17	1	10	1.5	SMA	160*52*12

\*Size: Exclude connectors.



Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD3-555-3400-30-N	0.555~3.4	30	1.0	20	0.7	7	1.25	N	136*78*20
QPD3-600-6000-30-S	0.6~6	30	2.6	20	0.8	8	1.5	SMA	130*50*12
QPD3-600-6000-30-N	0.6~6	30	2.8	20	0.8	8	1.5	N	130*74*20
QPD3-698-2700-50-N	0.698~2.7	50	0.6	20	0.4	4	1.25	N	77*94*19
QPD3-698-6000-30-N	0.698~6	30	2.0	18	0.8	8	1.5	N	130*74*18
QPD3-700-1100-10-S	0.7~1.1	10	1.0	20	0.6	-	1.35	SMA	86.5*45*12
QPD3-700-4000-30-S	0.7~4	30	1.2	20	0.5	5	1.3	SMA	94*50*12
QPD3-700-4000-30-N	0.7~4	30	1.4	20	0.5	5	1.3	N	94*74*20
QPD3-700-5000-30-N	0.7~5	30	1.5	18	0.8	8	1.4	N	138*74*22
QPD3-800-2500-K2-N	0.8~2.5	200	0.5	20	0.3	4	1.2	N	81*45*22
QPD3-800-2500-K2-7	0.8~2.5	200	0.5	20	0.3	4	1.2	7/16DIN	89*53*28
QPD3-1000-2000-30-S	1~2	30	0.8	20	0.4	4	1.25	SMA	71*50*14
QPD3-1000-3000-30-N	1~3	30	1.2	20	0.5	5	1.3	N	94*72*20
QPD3-1100-1700-30-S	1.1~1.7	30	0.4	20	0.4	4	1.25	SMA	68*50*10
QPD3-1100-1700-30-T	1.1~1.7	30	0.5	20	0.4	4	1.25	TNC	72*72*20
QPD3-2000-3000-20-S	2~3	20	0.5	18	0.5	5	1.3	SMA	55*50*12
QPD3-2000-4000-20-S	2~4	20	0.5	18	0.5	5	1.3	SMA	55*50*12
QPD3-2000-8000-20-S	2~8	20	1.0	18	0.5	5	1.4	SMA	66.5*37.5*10
QPD3-2000-8000-20-N	2~8	20	1.2	18	0.5	6	1.4	N	76*70*20
QPD3-2000-9000-30-S	2~9	30	1.5	18	0.5	5	1.5	SMA	66.5*37.5*10
QPD3-2000-18000-20-S	2~18	20	1.6	16	0.6	10	1.7	SMA	70*39*10
QPD3-2400-2500-20-S	2.4~2.5	20	0.8	30	0.4	4	1.25	SMA	48*60*10
QPD3-3400-3800-30-N	3.4~3.8	30	0.5	20	0.5	5	1.25	N	78*68*20
QPD3-6000-18000-20-S	6~18	20	1.2	18	0.6	6	1.5	SMA	51*38*10
QPD3-7000-8000-20-S	7~8	20	1.0	20	0.4	4	1.3	SMA	66.5*37.5*10
QPD3-8000-12000-20-S	8~12	20	1.0	18	0.5	5	1.4	SMA	51*38*10
QPD3-9000-11000-20-S	9~11	20	0.8	18	0.5	5	1.4	SMA	51*38*10
QPD3-16000-18000-20-S	16~18	20	0.8	18	0.5	5	1.4	SMA	51*38*10
QPD3-26000-31000-20-K	26~31	20	1.5	16	0.6	6	1.5	2.92mm	39*25.4*10

\*Size: Exclude connectors.



### Environmental

Operation Temperature: -35~+75°C

Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD4-0-1000-2-S	DC~1	2	12.8	11.8	0.5	8	1.2	SMA	25.4*22.2*16
QPD4-0-3000-2-S	DC~3	2	13.0	12	0.6	10	1.3	SMA	25.4*22.2*16
QPD4-0-4000-2-S	DC~4	2	13.5	11	0.7	15	1.4	SMA	25.4*22.2*16
QPD4-0-6000-2-S	DC~6	2	14	11.6	0.4	4	1.25	SMA	64*40*12.5
QPD4-0-6000-2-N	DC~6	2	15	11.5	0.5	5	1.25	N	100*50*20
QPD4-0-8000-2-S	DC~8	2	12±1.5	12	0.8	-	1.5	SMA	25.4*22.2*16
QPD4-0-10000-R5-S	DC~10	0.5	12±2.0	-	1	-	1.5	SMA	54*32*12
QPD4-0-18000-R5-S	DC~18	0.5	12±2.8	-	-	-	1.8	SMA	54*32*12
QPD4-0-26500-1-S	DC~26.5	1	15.6	9	0.8	-	2.6	SMA	34*55*10
QPD4-0-40000-1-K	DC~40	1	15.6	8	0.8	-	2.6	2.92mm	33.8*50.5*10
QPD4-5-500-30-S	0.005~0.5	30	5.0	20	0.3	4	1.3	SMA	418*170*14
QPD4-5-1000-R5-N	0.005~1	0.5	2.0	16	0.8	5	1.5	N	108*40*22
QPD4-10-100-R5-S	0.01~0.1	0.5	1.2	18	0.4	4	1.4	SMA	108*40*12
QPD4-10-100-R5-B	0.01~0.1	0.5	1.5	18	0.6	4	1.3	BNC	108*40*22
QPD4-10-500-K1-S	0.01~0.5	100	1	15	0.3	5	1.6	SMA	100*100*26
QPD4-40-900-R5-N	0.04~0.9	0.5	1.8	18	0.8	4	1.4	N	108*40*22
QPD4-70-2000-30-B	0.07~2	30	5.8	18	0.4	4	1.3	BNC	208*178*18
QPD4-80-500-30-S	0.08~0.5	30	11.5	20	0.2	3	1.25	SMA	170*110*12
QPD4-100-400-30-S	0.1~0.4	30	1	20	0.3	3	1.25	SMA	120*128*10
QPD4-100-500-30-S	0.1~0.5	30	5.0	20	0.3	4	1.3	SMA	418*170*14
QPD4-100-500-50-S	0.1~0.5	50	1.0	20	0.2	3	1.25	SMA	252*126*14
QPD4-100-500-50-N	0.1~0.5	50	1.0	20	0.2	3	1.25	N	252*126*22
QPD4-100-500-K3-N-20	0.1~0.5	300	0.8	20	0.2	3	1.25	N	270*224*22
QPD4-100-500-K3-N-K1	0.1~0.5	300	0.8	20	0.2	3	1.25	N	270*224*24
QPD4-100-500-K5-7	0.1~0.5	500	0.6	20	0.2	2	1.3	7/16DIN	284*228*35
QPD4-100-1000-30-S	0.1~1	30	1.8	18	0.3	4	1.25	SMA	120*118*10
QPD4-100-2000-30-S	0.1~2	30	3.4	20	0.3	4	1.3	SMA	156*118*10
QPD4-100-3000-30-S	0.1~3	30	5.6	18	0.3	4	1.3	SMA	226*90*12
QPD4-118-138-K5-N	0.118~0.138	500	0.5	25	0.2	2	1.2	N	278*175*20
QPD4-120-150-50-N	0.12~0.15	50	0.5	20	0.2	3	1.2	N	168*162*20
QPD4-120-560-50-N	0.12~0.56	50	1.0	20	0.2	3	1.2	N	202*142*20
QPD4-134-3700-30-N	0.134~3.7	30	4.2	18	0.4	4	1.4	N	215*96*20
QPD4-136-174-K3-N	0.136~0.174	300	0.4	20	0.2	2	1.2	N	255*208*22
QPD4-138-960-50-N	0.138~0.96	50	1.0	18	0.2	3	1.25	N	172*132*20
QPD4-150-960-50-N	0.15~0.96	50	1.4	20	0.4	4	1.4	N	214*132*20

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD4-150-2500-30-S	0.15~2.5	30	2.8	18	0.3	4	1.25	SMA	142*102*10
QPD4-200-250-30-S	0.2~0.25	30	0.5	20	0.3	3	1.2	SMA	118*112*14
QPD4-200-500-K3-N	0.2~0.5	300	0.5	20	0.3	3	1.2	N	255*150*20
QPD4-200-2000-30-S	0.2~2	30	1.6	20	0.3	3	1.3	SMA	114*80*12
QPD4-200-4000-30-S	0.2~4	30	3.2	18	0.4	4	1.45	SMA	164*72*12
QPD4-200-6000-30-S	0.2~6	30	4.2	18	0.4	4	1.4	SMA	140*92*12
QPD4-245-255-K1-S	0.245~0.255	100	0.5	25	0.2	3	1.25	SMA	88*53*10
QPD4-250-6000-30-S	0.25~6	30	3.5	18	0.3	4	1.3	SMA	127*86*12
QPD4-300-1000-K3-N	0.3~1	300	0.4	18	0.3	3	1.25	N	230*124*20
QPD4-300-3000-30-S	0.3~3	30	1.2	20	0.3	4	1.3	SMA	93*85*12
QPD4-300-6000-30-S	0.3~6	30	3.5	20	0.4	4	1.4	SMA	108*92*12
QPD4-350-800-50-N	0.35~0.8	50	0.5	18	0.3	3	1.25	N	106*104*20
QPD4-350-830-K15-B	0.35~0.83	150	0.8	20	0.3	3	1.3	BNC	202*116*20
QPD4-350-3800-30-S	0.35~3.8	30	1.6	18	0.3	4	1.3	SMA	102*68*12
QPD4-350-3800-30-N	0.35~3.8	30	1.8	18	0.3	4	1.3	N	102*91*20
QPD4-380-460-K1-7	0.38~0.46	100	0.5	20	0.3	3	1.25	7/16DIN	150*118*30
QPD4-380-470-K3-N	0.38~0.47	300	0.4	20	0.2	2	1.2	N	184*148*22
QPD4-380-8000-30-S	0.38~8	30	2.6	18	0.3	4	1.35	SMA	130*58*10
QPD4-400-470-30-S	0.4~0.47	30	0.5	20	0.3	3	1.2	SMA	114*110*14
QPD4-400-500-10-S	0.4~0.5	10	0.7	20	0.4	7	1.3	SMA	94*65*11
QPD4-400-1000-30-N	0.4~1	30	0.5	20	0.3	3	1.25	N	114*110*22
QPD4-400-1000-K1-N	0.4~1	100	0.5	20	0.3	3	1.25	N	150*110*22
QPD4-400-1000-K2-N	0.4~1	200	0.6	18	0.3	3	1.3	N	160*125*22
QPD4-400-2000-30-S	0.4~2	30	1.0	20	0.3	3	1.2	SMA	87*72*12
QPD4-400-4000-30-S	0.4~4	30	1.6	20	0.3	4	1.3	SMA	88*70*12
QPD4-400-6000-30-S	0.4~6	30	2.4	20	0.3	4	1.3	SMA	127*64*12
QPD4-400-6000-30-N	0.4~6	30	2.0	18	0.3	4	1.3	N	100*82*20
QPD4-400-6000-35-S	0.4~6	35	2.2	20	0.3	4	1.3	SMA	208*64*12
QPD4-400-8000-30-S	0.4~8	30	2.5	20	0.3	4	1.4	SMA	132*64*12
QPD4-400-8000-30-N	0.4~8	30	3.6	18	0.3	4	1.4	N	132*86*20
QPD4-450-6000-30-S	0.45~6	30	2.4	20	0.2	4	1.3	SMA	112*64*12
QPD4-500-1000-30-S	0.5~1	30	0.6	20	0.3	3	1.3	SMA	65*63*12
QPD4-500-1000-30-N	0.5~1	30	0.8	22	0.3	3	1.3	N	97*44*20
QPD4-500-2000-30-S	0.5~2	30	1.0	20	0.3	4	1.25	SMA	68*64*12
QPD4-500-2000-K2-N	0.5~2	200	0.7	20	0.4	4	1.25	N	152*150*20
QPD4-500-3000-30-S	0.5~3	30	1.0	20	0.3	4	1.2	SMA	82*65*12
QPD4-500-4000-K1-S	0.5~4	100	3.8	18	0.3	4	1.4	SMA	222*86*16
QPD4-500-4000-K1-N	0.5~4	100	2.0	18	0.3	4	1.4	N	182*98*20
QPD4-500-6000-30-S	0.5~6	30	1.8	20	0.3	4	1.3	SMA	100*62*12
QPD4-500-6000-30-N	0.5~6	30	2.0	20	0.3	4	1.3	N	100*86*20
QPD4-500-18000-30-S	0.5~18	30	2.5	15	0.8	8	2.0	SMA	163*68*10
QPD4-500-26500-20-S	0.5~26.5	20	5.2	16	0.4	6	1.6	SMA	158*56.5*12.7

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD4-500-40000-20-K	0.5~40	20	7.5	15	0.5	7	1.7	2.92mm	158.5*56.5*12.7
QPD4-555-3400-30-N	0.555~3.4	30	1.2	18	0.3	4	1.25	N	112*110*20
QPD4-600-2000-30-S	0.6~2	30	0.8	20	0.3	3	1.25	SMA	72*62*12
QPD4-600-3000-50-S	0.6~3	50	1.0	18	0.3	4	1.3	SMA	108*85*12
QPD4-600-3600-K1-S	0.6~3.6	100	2.0	10	0.3	4	1.3	SMA	128*85*12
QPD4-600-8000-30-S	0.6~8	30	2.2	20	0.3	4	1.3	SMA	110*58*10
QPD4-698-2700-50-N	0.698~2.7	50	0.8	20	0.4	4	1.3	N	94*77*19
QPD4-698-4000-50-N	0.698~4	50	2	20	0.3	4	1.25	N	134*96*20
QPD4-698-4000-50-4	0.698~4	50	1.5	20	0.3	4	1.3	4.3/10	178*128*30
QPD4-700-1100-30-S	0.7~1.1	30	0.4	22	0.3	3	1.2	SMA	66*66*12
QPD4-700-2000-30-N	0.7~2	30	0.6	20	0.3	3	1.2	N	100*45*20
QPD4-700-2700-30-S	0.7~2.7	30	0.6	18	0.3	4	1.25	SMA	64*52*12
QPD4-700-3000-30-S	0.7~3	30	0.8	20	0.3	4	1.2	SMA	72*60*12
QPD4-700-4000-30-S	0.7~4	30	1.0	20	0.3	3	1.3	SMA	66*66*12
QPD4-700-4000-30-N	0.7~4	30	1.0	20	0.4	4	1.3	N	98*74*20
QPD4-700-4700-30-N	0.7~4.7	30	1.6	20	0.3	4	1.3	N	100*92*20
QPD4-700-5000-30-N	0.7~5	30	2.0	18	0.3	5	1.4	N	130*130*22
QPD4-750-1710-30-S	0.75~1.71	30	0.4	20	0.3	3	1.2	SMA	64*52*12
QPD4-800-2500-30-S	0.8~2.5	30	0.6	20	0.3	4	1.2	SMA	56*50*12
QPD4-800-2500-K2-7	0.8~2.5	200	0.8	20	0.3	4	1.3	7/16DIN	138*95*28
QPD4-800-2700-30-S	0.8~2.7	30	0.6	20	0.3	4	1.25	SMA	64*52*12
QPD4-800-4200-K2-N	0.8~4.2	200	18.0	18	0.4	4	1.4	N	152*108*20
QPD4-800-5000-20-S	0.8~5	20	1.0	18	0.15	2	1.3	SMA	120*72*12
QPD4-850-2150-30-N	0.85~2.15	30	0.6	22	0.3	3	1.2	N	114*50*22
QPD4-950-2150-30-S	0.95~2.15	30	3.0	30	0.2	3	1.2	SMA	92*72*12
QPD4-950-2150-30-NS	0.95~2.15	30	3.0	30	0.3	3	1.2	N&SMA	106*70*20
QPD4-1000-2000-30-S	1~2	30	0.6	25	0.3	3	1.3	SMA	64*52*12
QPD4-1000-2000-30-N	1~2	30	0.8	20	0.3	3	1.3	N	97*44*20
QPD4-1000-2500-K1-N	1~2.5	100	0.6	18	0.3	4	1.25	N	114*110*22
QPD4-1000-2500-K1-NS	1~2.5	100	0.6	18	0.3	4	1.25	N&SMA	114*110*22
QPD4-1000-3000-30-S	1~3	30	0.6	20	0.3	3	1.3	SMA	56*43*10
QPD4-1000-4000-30-S	1~4	30	0.8	20	0.3	3	1.3	SMA	56*43*10
QPD4-1000-6000-30-S	1~6	30	1.2	20	0.3	4	1.3	SMA	60*55*12
QPD4-1000-8000-30-S	1~8	30	1.5	20	0.4	5	1.4	SMA	70.5*56*10
QPD4-1000-18000-20-S	1~18	20	3.0	16	0.5	6	1.55	SMA	99*71*10
QPD4-1100-1700-20-B	1.1~1.7	30	0.5	20	0.3	3	1.2	BNC	102*72*20
QPD4-1100-1700-20-T	1.1~1.7	30	0.5	20	0.3	3	1.2	TNC	102*72*20
QPD4-1100-1700-20-N	1.1~1.7	30	0.5	20	0.3	3	1.2	N	102*72*20
QPD4-1100-2700-K1-S	1.1~2.7	100	0.6	18	0.3	4	1.25	SMA	110*100*11
QPD4-1300-2400-30-S	1.3~2.4	30	0.5	22	0.1	1	1.2	SMA	64*52*12
QPD4-1900-5800-30-S	1.9~5.8	30	0.5	20	0.3	4	1.25	SMA	56*50*12
QPD4-2000-2400-30-N	2~2.4	30	0.5	20	0.3	3	1.25	N	97*40*20

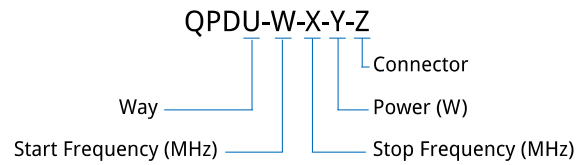
\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD4-2000-4000-30-S	2~4	30	0.6	20	0.3	3	1.25	SMA	56*50*10
QPD4-2000-4000-30-N	2~4	30	0.8	20	0.3	3	1.25	N	97*49*20
QPD4-2000-6000-K4-NS	2~6	400	0.8	15	0.5	10	1.6	N&SMA	210*64.2*30
QPD4-2000-6000-30-S	2~6	30	0.6	22	0.3	4	1.25	SMA	56*50*12
QPD4-2000-6000-30-N	2~6	30	1.0	20	0.3	4	1.25	N	97*49*20
QPD4-2000-6000-50-S	2~6	50	1.5	18	0.3	4	1.35	SMA	94*60*10
QPD4-2000-8000-30-S	2~8	30	1.2	18	0.3	4	1.4	SMA	56*50*10
QPD4-2000-8000-30-N	2~8	30	1.2	18	0.3	4	1.4	N	97*49*20
QPD4-2000-9000-30-S	2~9	30	1.8	18	0.3	4	1.4	SMA	56*56*10
QPD4-2000-12000-20-S	2~12	20	1.6	17	0.4	5	1.5	SMA	69*60*10
QPD4-2000-18000-20-S	2~18	20	2.0	17	0.4	6	1.5	SMA	69*60*10
QPD4-2000-26500-20-S	2~26.5	20	2.6	16	0.5	6	1.7	SMA	73*59*10
QPD4-2000-26500-20-K	2~26.5	20	2.6	16	0.5	6	1.7	2.92mm	73*59*10
QPD4-2000-40000-20-K	2~40	20	3.0	15	0.5	10	2.1	2.92mm	52*46*10
QPD4-2400-5900-50-N	2.4~5.9	50	0.6	18	0.2	3	1.3	N	110*70*22
QPD4-2400-5900-K1-N	2.4~5.9	100	1.0	18	0.3	4	1.25	N	110*108*22
QPD4-2400-6000-K1-N	2.4~6	100	1.2	18	0.3	4	1.3	N	110*108*22
QPD4-2400-6000-K1-NS	2.4~6	100	1.2	18	0.3	4	1.3	N&SMA	110*108*22
QPD4-2500-4000-K2-N	2.5~4	200	1.0	18	0.3	4	1.35	N	108*102*22
QPD4-2600-3500-K15-N	2.6~3.5	150	0.5	18	0.2	3	1.25	N	115*104*22
QPD4-3000-5000-K1-N	3~5	100	0.8	18	0.3	4	1.25	N	110*108*22
QPD4-3400-3800-30-N	3.4~3.8	30	0.5	18	0.2	3	1.25	N	110*63*20
QPD4-3400-3800-K1-N	3.4~3.8	100	0.6	20	0.2	3	1.25	N	110*102*20
QPD4-3400-4800-30-SN	3.4~4.8	30	0.8	25	0.3	3	1.25	SMA&N	105*50*20
QPD4-4000-8000-30-S	4~8	30	0.6	20	0.3	3	1.3	SMA	55*36*10
QPD4-4000-12000-20-S	4~12	20	1.2	18	0.2	4	1.4	SMA	60*54*10
QPD4-4000-18000-20-S	4~18	20	2	17	0.4	6	1.5	SMA	60*69*10
QPD4-5500-6000-30-SM	5.5~6	30	0.6	20	0.3	4	1.3	SMA	56*43*10
QPD4-6000-11000-20-S	6~11	20	1.0	18	0.3	4	1.3	SMA	60*58*10
QPD4-6000-18000-20-S	6~18	20	1.2	18	0.3	6	1.5	SMA	50.5*45*10
QPD4-6000-18000-50-S	6~18	50	1.5	18	0.4	5	1.6	SMA	91*45*10
QPD4-6000-18000-K1-S	6~18	100	1.5	15	0.4	5	1.6	SMA	85*50*10
QPD4-6900-7400-30-S	6.9~7.4	30	0.5	20	0.3	3	1.25	SMA	60*36*10
QPD4-7000-8500-30-S	7~8.5	30	0.6	20	0.3	3	1.3	SMA	60*36*10
QPD4-7000-9000-30-S	7~9	30	0.6	18	0.3	3	1.3	SMA	60*36*10
QPD4-8000-12000-20-S	8~12	20	1.0	18	0.4	5	1.4	SMA	60*54*10
QPD4-8000-30000-20-K	8~30	20	1.6	16	0.4	4	1.5	2.92mm	52*35*10
QPD4-10000-26500-20-K	10~26.5	20	1.5	16	0.4	4	1.5	2.92mm	52*35*10
QPD4-10000-40000-20-K	10~40	20	1.5	16	0.4	6	1.5	2.92mm	52.3*38.1*10
QPD4-10700-12750-20-S	10.7~12.75	20	1.0	18	0.4	5	1.4	SMA	54*48*10
QPD4-10900-12700-20-S	10.9~12.7	20	1.0	18	0.4	5	1.4	SMA	60*50*10
QPD4-10900-12700-20-N	10.9~12.7	20	1.0	18	0.4	5	1.4	N	97*49*20

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. ( $\pm$ dB, max.)	Phase Bal. ( $\pm^\circ$ , max.)	VSWR (max.)	Connector	Size (mm)
QPD4-12000-15000-20-S	12~15	20	1.0	18	0.3	4	1.4	SMA	54*50*10
QPD4-13750-14500-20-S	13.75~14.5	20	1.0	18	0.4	5	1.4	SMA	60*50*10
QPD4-13750-14500-20-N	13.75~14.5	20	1.0	18	0.4	5	1.4	N	97*49*20
QPD4-15000-17000-20-S	15~17	20	1.2	18	0.4	4	1.4	SMA	54*48*10
QPD4-18000-26500-20-K	18~26.5	20	1.6	16	0.4	6	1.6	2.92mm	52.3*38.1*10
QPD4-18000-40000-20-K	18~40	20	1.5	16	0.4	6	1.5	2.92mm	52.3*38.1*10
QPD4-18000-50000-20-2	18~50	20	2.5	15	0.6	10	1.8	2.4mm	52*24*10
QPD4-24000-40000-20-K	24~40	20	1.6	16	0.4	8	1.8	2.92mm	52*35*10
QPD4-25000-50000-20-V	25~50	20	2.0	15	0.6	10	1.8	1.85mm	52*24*10
QPD4-26000-31000-20-K	26~31	20	1.4	16	0.4	6	1.5	2.92mm	52*35*10
QPD4-34000-36000-20-K	34~36	20	1.4	16	0.4	5	1.5	2.92mm	52.3*38.1*10

\*Size: Exclude connectors.



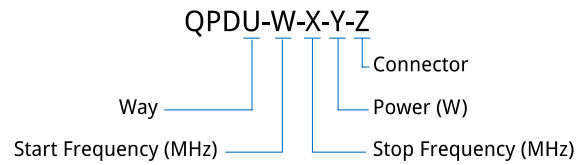
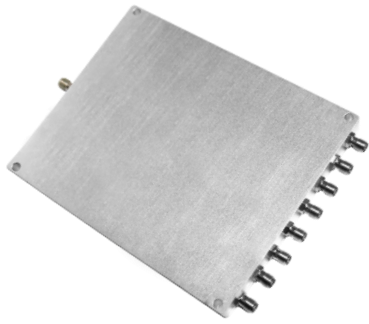
### Environmental

Operation Temperature: -35~+75°C

Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD6-0-1000-1-S	DC~1	1	16±1.5	16	0.6	-	1.2	SMA	33.7*32.9*16
QPD6-0-6000-2-S	DC~6	2	17	14.6	0.8	9	1.5	SMA	80*40*12
QPD6-0-8000-2-S	DC~8	2	18±1	16	1.5	-	1.5	SMA	33.7*32.9*16
QPD6-0-10000-R5-S	DC~10	0.5	16±3.5	-	3	-	1.7	SMA	80*40*12
QPD6-1-200-2-S	0.001~0.2	2	15.9	14.6	0.3	3	1.2	SMA	92*44*12.5
QPD6-400-500-10-S	0.4~0.5	10	1.2	20	0.7	10	1.3	SMA	142*85*11
QPD6-400-4000-30-SN	0.4~4	30	3.0	18	0.9	10	1.3	SMA&N	138*132*20
QPD6-500-2000-20-S	0.5~2	20	1	20	0.5	5	1.3	SMA	120*96*10
QPD6-500-3000-50-S	0.5~3	50	2.6	18	1.5	20	1.5	SMA	118*105*12
QPD6-500-6000-30-S	0.5~6	30	3.0	18	0.8	8	1.5	SMA	150*94*12
QPD6-500-6000-30-N	0.5~6	30	4.0	18	1	10	1.5	N	150*142*20
QPD6-500-8000-20-S	0.5~8	20	3.5	17	1	10	1.55	SMA	220*94*12
QPD6-700-2700-40-S	0.7~2.7	40	1.0	20	0.5	6	1.3	SMA	124*98*12
QPD6-700-4000-30-S	0.7~4	30	1.6	18	0.8	8	1.4	SMA	110*80*12
QPD6-800-2500-20-S	0.8~2.5	20	1.0	20	0.4	5	1.3	SMA	88*85*14
QPD6-800-2700-30-N	0.8~2.7	30	1.4	18	0.5	6	1.35	N	150*95*20
QPD6-800-3000-30-S	0.8~3	30	1.2	20	0.5	6	1.3	SMA	88*85*12
QPD6-900-6100-20-S	0.9~6.1	20	3	20	0.8	8	1.5	SMA	138*94*10
QPD6-1000-1700-30-S	1~1.7	30	1.0	20	0.4	5	1.3	SMA	85*65*12
QPD6-1000-1700-30-N	1~1.7	30	1.0	20	0.4	4	1.3	N	155*98*20
QPD6-1000-1700-30-T	1~1.7	30	1.0	20	0.4	4	1.3	TNC	155*98*20
QPD6-1000-2000-30-N	1~2	30	1.2	20	0.5	5	1.3	N	156*76*20
QPD6-1000-8000-20-S	1~8	20	1.8	18	0.5	6	1.5	SMA	130*80*10
QPD6-1500-5000-20-S	1.5~5	20	1.0	18	0.4	5	1.35	SMA	88*83*10
QPD6-2000-6000-30-S	2~6	30	1.0	20	0.5	6	1.35	SMA	88*83*10
QPD6-2000-8000-30-S	2~8	30	1.2	20	0.5	6	1.35	SMA	88*83*10
QPD6-2000-18000-20-S	2~18	20	2.6	16	0.6	8	1.5	SMA	109*76*10
QPD6-3700-4900-20-SP	3.7~4.9	20	0.5	20	0.3	1.2	1.25	SMA&SMP	66*58*10
QPD6-4000-8000-30-S	4~8	30	1.0	20	0.5	5	1.4	SMA	83*68*10
QPD6-8000-17000-20-S	8~17	20	1.5	18	0.8	8	1.7	SMA	70.5*50*10

\*Size: Exclude connectors.



### Environmental

Operation Temperature: -35~+75°C

Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD8-0-2000-2-N	DC~2	2	22.0	20	0.4	5	1.3	N	196*60*20
QPD8-0-3000-2-S	DC~3	2	18.5	17	0.5	5	1.3	SMA	120*60*12
QPD8-0-3000-2-N	DC~3	2	23.0	20	0.6	8	1.3	N	196*60*20
QPD8-0-4000-2-S	DC~4	2	19.5	17	0.8	8	1.4	SMA	120*60*12
QPD8-0-6000-2-S	DC~6	2	18±2.5	18	1.2	-	1.5	SMA	43.2*42.5*16
QPD8-0-8000-2-S	DC~8	2	20±1.5	18	1.8	-	1.6	SMA	43.2*42.5*16
QPD8-0-10000-R5-S	DC~10	0.5	18±2.8	-	2	-	1.6	SMA	106*50*12
QPD8-0-18000-1-S	DC~18	1	23.0	18	1.4	-	2.5	SMA	92.5*60.5*10
QPD8-5-1000-1-S	0.005~1	1	3.0	18	0.5	10	1.5	SMA	120*32*13
QPD8-5-1000-50-S	0.005~1	50	1.6	12	0.2	5	1.6	SMA	164*126*26
QPD8-10-100-1-S	0.01~0.1	1	1.0	20	0.4	4	1.3	SMA	120*32*13
QPD8-30-3000-2-S	0.03~3	2	18.5	17	0.5	5	1.3	SMA	120*60*12
QPD8-80-500-30-S	0.08~0.5	30	1.8	18	0.2	3	1.3	SMA	202*166*10
QPD8-80-4000-30-S	0.08~4	30	6.6	13	0.4	8	1.55	SMA	332*164*12
QPD8-98-102-30-N	0.098~0.102	30	0.8	20	0.2	3	1.2	N	215*168*20
QPD8-100-700-1-S	0.1~0.7	1	2.0	18	0.4	8	1.5	SMA	120*32*13
QPD8-100-700-30-S	0.1~0.7	30	2.0	20	0.3	3	1.25	SMA	190*190*12
QPD8-100-2000-30-S	0.1~2	30	3.4	18	0.3	4	1.35	SMA	224*220*10
QPD8-100-3000-30-S	0.1~3	30	6.5	18	0.3	6	1.35	SMA	322*170*10
QPD8-100-4000-30-SMS	0.1~4	30	6.5	12	0.5	6	1.55	SMA	252*158*10
QPD8-200-1000-30-S	0.2~1	30	1.4	20	0.4	4	1.25	SMA	172*138*12
QPD8-200-1000-K1-S	0.2~1	100	1	20	0.3	4	1.25	SMA	364*208*14
QPD8-200-2000-30-S	0.2~2	30	2.8	18	0.3	4	1.3	SMA	168*142*10
QPD8-200-2300-30-S	0.2~2.3	30	3.0	18	0.3	4	1.3	SMA	218*118*12
QPD8-200-6000-30-S	0.2~6	30	6.8	17	0.5	5	1.35	SMA	260*120*12
QPD8-223-235-30-S	0.223~0.235	30	1.2	20	0.4	4	1.3	SMA	138*130*12
QPD8-240-30-S	0.24	30	0.6	20	0.2	2	1.2	SMA	202*106*14
QPD8-300-500-30-S	0.3~0.5	30	0.8	20	0.2	3	1.25	SMA	210*98*12
QPD8-300-3000-NS	0.3~3	30	2.6	20	0.3	4	1.3	SMA&N	163*120*20
QPD8-300-3000-30-S	0.3~3	30	3.0	20	0.3	4	1.35	SMA	163*120*12
QPD8-300-6000-30-S	0.3~6	30	5.2	18	0.4	5	1.4	SMA	176*120*12
QPD8-400-900-30-B	0.4~0.9	30	0.6	20	0.3	3	1.25	BNC	194*124*20
QPD8-400-4000-30-S	0.4~4	30	2.4	20	0.4	4	1.35	N	200*100*20
QPD8-400-4000-30-N	0.4~4	30	2.4	20	0.4	4	1.35	N	200*100*20

\*Size: Exclude connectors.

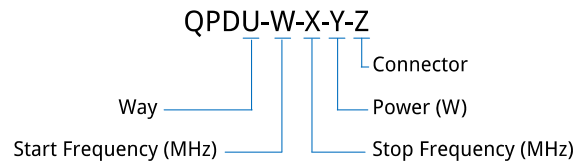
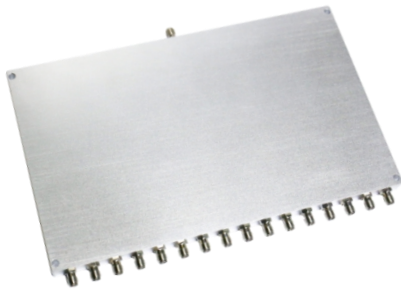


Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD8-400-6000-30-S	0.4-6	30	3.2	20	0.4	5	1.35	SMA	138*120*12
QPD8-400-6000-80-S	0.4-6	80	6.0	18	0.3	6	1.6	SMA	324*185*14
QPD8-450-6000-30-S	0.45-6	30	3.2	18	0.3	4	1.35	SMA	120*120*12
QPD8-470-510-10-S	0.47-0.51	10	2.0	20	0.5	5	1.3	SMA	190*60*11
QPD8-470-510-20-S	0.47-0.51	20	1.5	20	0.5	5	1.3	SMA	192*81*12
QPD8-500-2000-30-S	0.5-2	30	1.5	20	0.4	4	1.3	SMA	123*120*12
QPD8-500-3000-30-S	0.5-3	30	1.5	20	0.4	4	1.3	SMA	120*100*12
QPD8-500-3000-30-N	0.5-3	30	1.8	20	0.3	4	1.3	N	200*95*20
QPD8-500-4000-30-NS	0.5-4	30	2.0	20	0.3	4	1.3	SMA&N	120*110*20
QPD8-500-4000-30-S	0.5-4	30	2.3	20	0.2	4	1.3	SMA	126*110*12
QPD8-500-6000-30-S	0.5-6	30	3.0	18	0.4	4	1.4	SMA	115*113*12
QPD8-500-6000-30-N	0.5-6	30	3.0	18	0.4	5	1.4	N	200*120*20
QPD8-500-8000-30-S	0.5-8	30	3.8	20	0.4	5	1.45	SMA	150*120*12
QPD8-500-8000-30-N	0.5-8	30	6.0	18	0.4	5	1.45	N	200*150*20
QPD8-500-18000-20-S	0.5-18	20	6.0	14	0.8	10	2	SMA	172*160*10
QPD8-600-2000-30-S	0.6-2	30	1.0	20	0.3	4	1.25	SMA	112*70*12
QPD8-600-6000-30-S	0.6-6	30	2.8	20	0.4	5	1.4	SMA	115*113*12
QPD8-600-6000-30-N	0.6-6	30	3.2	18	0.4	5	1.4	N	200*120*20
QPD8-600-8000-30-S	0.6-8	30	3.6	20	0.4	5	1.4	SMA	130*118*10
QPD8-700-3000-30-S	0.7-3	30	1.0	20	0.3	4	1.3	SMA	116*86*14
QPD8-700-3000-30-N	0.7-3	30	1.2	20	0.4	4	1.3	N	196*88*20
QPD8-700-4000-30-N	0.7-4	30	1.8	20	0.4	4	1.3	N	200*100*20
QPD8-750-1710-30-S	0.75-1.71	30	0.6	20	0.3	3	1.2	SMA	112*70*12
QPD8-800-2000-30-S	0.8-2	30	1.0	20	0.3	4	1.25	SMA	101.6*68.58*10.16
QPD8-800-2500-30-N	0.8-2.5	30	1.4	20	0.4	4	1.25	N	196*88*20
QPD8-800-2700-30-N	0.8-2.7	30	1.5	20	0.4	4	1.3	N	196*88*20
QPD8-800-4200-30-S	0.8-4.2	30	1.8	20	0.4	4	1.4	SMA	120*90*12
QPD8-800-5000-20-S	0.8-5	20	1.5	20	0.4	3	1.4	SMA	150*148*12
QPD8-800-6000-20-S	0.8-6	20	2.0	20	0.4	5	1.35	SMA	118*108*10
QPD8-800-8000-30-S	0.8-8	30	3.6	20	0.4	5	1.4	SMA	118*115*10
QPD8-950-2150-30-S	0.95-2.15	30	3.0	30	0.3	3	1.25	SMA	110*93*12
QPD8-950-2150-30-N	0.95-2.15	30	1.2	22	0.4	4	1.25	N	196*88*20
QPD8-950-2150-30-T	0.95-2.15	30	0.8	20	0.3	3	1.25	TNC	192*62*20
QPD8-950-2150-30-NS	0.95-2.15	30	3.0	30	0.3	3	1.25	N&SMA	224*80*21
QPD8-1000-1700-30-S	1-1.7	30	0.8	22	0.4	4	1.25	SMA	112*70*12
QPD8-1000-6000-20-S	1-6	20	3.5	18	0.5	5	1.4	SMA	119*102*12
QPD8-1000-18000-20-S	1-18	20	4.0	15	0.5	10	1.8	SMA	156*110*10
QPD8-1100-1700-30-T	1.1-1.7	30	0.8	22	0.3	3	1.25	TNC	192*62*20
QPD8-1370-30-S	1.37	30	0.8	20	0.2	3	1.2	SMA	112*70*12
QPD8-1500-1700-20-S	1.5-1.7	20	0.3	20	0.2	4	1.25	SMA	138*125*14
QPD8-1500-5000-30-S	1.5-5	30	1.2	20	0.2	2	1.3	SMA	108*63*10
QPD8-1525-1850-K1-N	1.525-1.85	100	0.8	18	0.3	4	1.2	N	212*125*22

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD8-1850-2700-K25-N	1.85~2.7	250	0.8	18	0.4	4	1.3	N	212*145*22
QPD8-2000-6000-30-S	2~6	30	1.0	18	0.3	4	1.3	SMA	108*63*10
QPD8-2000-6000-30-N	2~6	30	1.2	20	0.4	4	1.3	N	200*60*20
QPD8-2000-8000-30-S	2~8	30	1.5	18	0.4	5	1.35	SMA	108*63*10
QPD8-2000-10000-30-S	2~10	30	2.0	18	0.4	4	1.4	SMA	110*80*10
QPD8-2000-18000-20-S	2~18	20	3.2	16	0.5	10	1.6	SMA	148.5*95*10
QPD8-2000-26500-20-S	2~26.5	20	3.2	16	0.8	10	1.9	SMA	123.5*88*10
QPD8-2000-26500-20-K	2~26.5	20	3.2	16	0.8	10	1.9	2.92mm	123.5*88*10
QPD8-2400-6000-30-S	2.4~6	30	1.5	20	0.4	4	1.35	SMA	108*63*10
QPD8-3000-13000-20-S	3~13	20	2.0	18	0.4	6	1.4	SMA	188*98*10
QPD8-4000-6000-30-S	4~6	30	1.2	18	0.4	4	1.4	SMA	108*63*10
QPD8-4000-8000-30-S	4~8	30	0.8	18	0.3	5	1.35	SMA	112*56*12
QPD8-4000-12000-20-S	4~12	20	1.5	18	0.2	4	1.5	SMA	110*82*10
QPD8-4900-5900-30-S	4.9~5.9	30	0.8	20	0.3	3	1.3	SMA	108*63*10
QPD8-5000-12000-20-S	5~12	20	1.2	18	0.5	5	1.4	SMA	104*55*10
QPD8-6000-12000-20-SM	6~12	20	1.5	18	0.4	5	1.5	SMA	106*60*10
QPD8-6000-18000-50-S	6~18	50	2.4	17	0.5	8	1.8	SMA	191*63*10
QPD8-6000-18000-K1-S	6~18	100	2.4	15	0.5	8	1.8	SMA	191*70*10
QPD8-6000-43500-20-K	6~43.5	20	3.2	15	0.5	8	2.2	2.92mm	104*40*10
QPD8-8000-9000-K1-S	8~9	100	1.5	18	0.5	5	1.35	SMA	191*70*10
QPD8-8000-12000-20-S	8~12	20	1.4	18	0.4	5	1.4	SMA	122.5*57.5*10
QPD8-9000-11000-20-S	9~11	20	1.2	18	0.4	5	1.4	SMA	122.5*57.5*10
QPD8-9000-45000-R1-2	9~45	0.1	7.0	15	1	20	1.4	2.4mm	120*40*12.7
QPD8-18000-26500-20-K	18~26.5	20	1.8	16	0.5	6	1.6	2.92mm	104*40*10
QPD8-18000-40000-20-K	18~40	20	3.2	16	0.5	8	1.7	2.92mm	104*40*10
QPD8-35350-36150-20-K	35.35~36.15	20	1.8	18	0.5	8	1.5	2.92mm	104*40*10
QPD8-40000-50000-16-2	40~50	16	4.2	18	0.8	10	1.8	2.4mm	103.7*30*12.7
QPD8-50000-66000-R1	50~66	0.1	6.0	15	1	20	1.4	WR-15	180*50*20

\*Size: Exclude connectors.



### Environmental

Operation Temperature: -35~+75°C

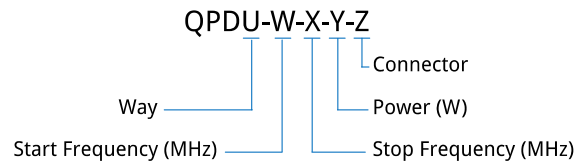
Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD16-0-3000-2-S	DC~3	2	24±2.5	24	1.5	-	1.4	SMA	81.3*80.9*16
QPD16-5-300-1-S	0.005~0.3	1	2.7	18	0.9	15	1.5	SMA	50*209*10
QPD16-5-1000-2-S	0.005~1	2	24±2.0	24	1.2	-	1.3	SMA	81.3*80.9*16
QPD16-50-1000-1-S	0.05~1	1	3.7	18	0.9	15	1.5	SMA	50*209*10
QPD16-50-5000-2-S	0.05~5	2	28	22	0.8	8	1.5	SMA	236*80*12
QPD16-98-102-30-N	0.098~0.102	30	1.2	20	0.3	3	1.2	N	420*196*20
QPD16-200-2000-30-NS	0.2~2	30	3.5	20	0.2	2	1.5	SMA&N	160*370*20
QPD16-260-460-20-S	0.26~0.46	20	1.5	20	0.3	4	1.25	SMA	300*138*14
QPD16-300-4000-30-S	0.3~4	30	4.0	18	0.4	6	1.45	SMA	236*176*12
QPD16-380-6000-30-S	0.38~6	30	6.0	18	0.5	8	1.5	SMA	232*180*12
QPD16-380-6000-30-N	0.38~6	30	6.8	18	0.5	8	1.5	N	388*180*20
QPD16-400-6000-30-S	0.4~6	30	5.0	18	0.5	8	1.5	SMA	160*232*12
QPD16-500-3000-50-S	0.5~3	50	3.0	18	1	15	1.6	SMA	217*125*12
QPD16-500-3000-50-N	0.5~3	50	3.0	18	1	15	1.6	N	386*125*18
QPD16-500-6000-30-S	0.5~6	30	4.8	20	0.5	8	1.5	SMA	236*150*12
QPD16-500-6000-30-N	0.5~6	30	4.8	18	0.5	8	1.5	N	388*150*20
QPD16-600-2000-30-S	0.6~2	30	1.4	20	0.2	2	1.3	SMA	102*218*12
QPD16-600-3000-30-N	0.6~3	30	2.2	20	0.4	6	1.4	N	113*218*20
QPD16-600-6000-30-S	0.6~6	30	4.5	18	0.4	6	1.5	SMA	140*232*12
QPD16-700-3000-30-S	0.7~3	30	1.4	20	0.3	5	1.4	SMA	212*104*12
QPD16-700-3000-30-N	0.7~3	30	1.8	20	0.4	6	1.4	N	388*110*20
QPD16-700-4000-30-S	0.7~4	30	2.4	18	0.4	8	1.4	SMA	232*110*12
QPD16-700-4000-30-T	0.7~4	30	2.2	20	0.4	6	1.4	TNC	388*110*20
QPD16-700-6000-30-N	0.7~6	30	3.8	18	0.5	8	1.5	N	388*110*20
QPD16-700-6000-30-T	0.7~6	30	3.5	20	0.5			TNC	388*110*20
QPD16-800-5000-50-N	0.8~5	50	3.5	18	0.4	6	1.4	N	480*160*22
QPD16-950-2150-30-S	0.95~2.15	30	1.2	25	0.3	4	1.3	SMA	90*214*12
QPD16-1000-2000-30-S	1~2	30	1.2	25	0.3	4	1.3	SMA	90*214*12
QPD16-1000-4000-30-SN	1~4	30	1.6	20	0.4	5	1.4	SMA&N	100*224*20
QPD16-1000-6000-30-S	1~6	30	2.5	20	0.5	6	1.45	SMA	100*236*12
QPD16-1000-18000-20-S	1~18	20	6.5	15	1.8	12	2	SMA	126*315.5*10
QPD16-1100-1600-N	1.1~1.6	-	-	20	0.4	6	1.8	N	110*388*20
QPD16-1500-5000-30-S	1.5~5	30	2.0	18	0.2	2	1.3	SMA	218*80*12

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QPD16-2000-3000-30-S	2~3	30	1.2	20	0.2	2	1.3	SMA	212*67*10
QPD16-2000-4000-30-S	2~4	30	0.6	18	0.3	5	1.35	SMA	215*130*10
QPD16-2000-4000-50-S	2~4	50	0.6	16	3	5	1.35	SMA	241*164*10
QPD16-2000-6000-30-S	2~6	30	2.0	18	0.2	2	1.3	SMA	218*80*12
QPD16-2000-18000-20-S	2~18	20	5.0	15	0.7	10	2	SMA	120*215*10
QPD16-2490-2690-30-S	2.49~2.69	30	1.0	20	0.3	4	1.25	SMA	70*212*12
QPD16-2610-3000-30-S	2.61~3	30	1.0	20	0.3	4	1.3	SMA	67*212*12.5
QPD16-5000-12000-20-S	5~12	20	4.0	16	0.7	10	1.8	SMA	82*215*10
QPD16-5000-18000-20-S	5~18	20	5.0	15	0.7	10	2	SMA	120*215*10
QPD16-6000-18000-20-S	6~18	20	1.8	17	0.8	4	1.6	SMA	60*212*10
QPD16-8000-12000-20-S	8~12	20	1.8	18	0.5	6	1.5	SMA	212*85*10

\*Size: Exclude connectors.



### Environmental

Operation Temperature: -35~+75°C

Impedance: 50Ω

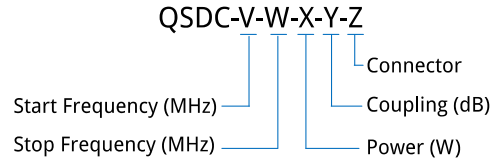
Part Number	Ways	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connect or	Size (mm)
QPD5-0-3000-2-S	5 Way	DC~3	2	17.5	15	0.8	-	1.25	SMA	25.4*29.3*16
QPD5-2000-4000-20-S		2~4	20	1.0	18	0.8	8	1.3	SMA	100*80*12
QPD5-2400-2700-50-S		2.4~2.7	50	1.2	18	0.6	6	1.4	SMA	130*92*16
QPD10-500-6000-30-S	10 Way	0.5~6	30	5.8	18	1.5	12	1.5	SMA	200*150*12
QPD10-600-6000-30-S		0.6~6	30	3.5	18	0.8	12	1.5	SMA	150*148*12
QPD10-2000-30-S		2	30	0.8	20	0.2	2	1.3	SMA	130*150*12
QPD11-0-1000-2-N	11 Way	DC~1	2	20.0±1.5	20	0.5	-	1.3	N	78.4*78.4*18
QPD12-0-5000-2-S	12 Way	DC~5	2	24.5	20	0.9	9	1.3	SMA	178*70*12.5
QPD12-240-30-S		0.24	30	0.8	20	0.5	4	1.3	SMA	280*152*14
QPD12-500-8000-20-S		0.5~8	20	5.0	16	1.2	12	1.6	SMA	286*180*12
QPD12-600-6000-30-S		0.6~6	30	5.0	18	1	12	1.5	SMA	180*178*12
QPD12-700-6000-30-S		0.7~6	30	4.3	16	1	20	1.6	SMA	272*106*10
QPD12-1000-2000-30-N		1~2	30	1.5	20	0.5	6	1.4	N	300*100*20
QPD12-2000-6000-30-S		2~6	30	2.2	18	0.8	10	1.5	SMA	156*92*10
QPD12-2000-8000-30-S		2~8	30	1.6	18	0.6	6	1.45	SMA	156*92*10
QPD12-2000-18000-20-S		2~18	20	4.2	15	0.8	12	2	SMA	230*120*10
QPD12-4900-5200-30-S		4.9~5.2	30	1.0	20	0.6	3	1.4	SMA	156*92*10
QPD12-5000-6000-20-S		5~6	20	1.6	20	0.25	5	1.22	SMA	156*92*10
QPD12-5800-20-S		5.8	20	1.6	20	0.5	6	1.4	SMA	156*92*10
QPD12-6000-18000-20-S		6~18	20	2.0	16	0.6	8	1.8	SMA	154*76*10
QPD12-8000-12000-20-S		8~12	20	1.5	16	0.6	8	1.7	SMA	154*76*10
QPD18-700-4000-30-S		18 Way	0.7~4	30	3.0	18	1	12	1.5	SMA
QPD18-900-1300-30-S	0.9~1.3		30	1.0	18	0.5	3	1.5	SMA	210*263*14
QPD18-1000-2000-30-S	1~2		30	2.4	18	0.1	12	1.5	SMA	185*263*14
QPD24-20-480-1-S	24 Way	0.02~0.48	1	2.4	16	1	12	1.6	SMA	348*115*14
QPD24-315-433-30-S		0.315~0.433	30	1.2	20	0.8	8	1.4	SMA	498*164*14
QPPD24-500-3000-20-S		0.3~3	20	2.8	18	0.8	8	1.5	SMA	200*344*12
QPD24-1300-1600-20-S		1.3~1.6	20	1.4	20	0.5	6	1.35	SMA	348*115*14
QPD32-400-490-30-S	32 Way	0.4~0.49	30	1.6	22	0.3	3	1.25	SMA	482*185*15
QPD32-700-3000-30-S		0.7~0.3	30	2.0	18	0.4	5	1.4	SMA	427*120*12
QPD32-700-4000-50-N		0.7~4	50	2.8	18	0.5	8	1.5	N	580*444*20
QPD32-1000-2000-30-S		1~2	30	1.4	18	0.5	5	1.4	SMA	456*90*14
QPD32-1000-4000-K1-N		1~4	100	2.2	18	0.5	8	1.5	N	580*444*20

\*Size: Exclude connectors.

## Description

Single directional coupler can be used to monitor and control the output power and frequency spectrum of transmitter. It can also be used as a power meter with detector and level indicator.

**Features:** Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifier, Transmitter, Radar, Laboratory Test.



\*Operating Temperature: 0~+50°C

\*Non-operating Temperature: -20~+70°C

\*Impedance: 50Ω

Part Number	Freq. (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size (mm)
QSDC-0.01-250-K6-50-NS	0.00001~0.25	600	50±1	0.4	20	1.25	SMA&N	256.4*52*80
QSDC-1-10-K15-20-S	0.001~0.01	150	20±0.5	0.2	20	1.2	SMA	50.8*50*22.35
QSDC-20-1000-50-20-S	0.02~1	50	20±1.5	0.65	20	1.5	SMA	50.8*51*22.35
QSDC-30-1000-50-20-S	0.03~1	50	20±1.5	0.65	18	1.5	SMA	50.8*51*22.35
QSDC-80-1000-K25-40-S	0.08~1	250	40±1	0.3	16	1.15	SMA	50.8*51*22.35
QSDC-80-1000-K6-60-NS	0.08~1	600	60±1	0.4	20	1.2	SMA&N	152.4*30*80
QSDC-100-700-10-10-S	0.1~0.7	10	10±2	0.9	12	1.3	SMA	250*66*15
QSDC-130-470-50-6-S	0.13~0.47	50	6±1.2	0.7	20	1.25	SMA	412*15*11
QSDC-200-2000-50-30-S	0.2~2	50	30±1.5	0.8	15	1.3	SMA	270*20*11
QSDC-300-800-50-30-S	0.3~0.8	50	30±1	0.3	10	1.2	SMA	180*15*11
QSDC-300-2400-30-10-S	0.3~2.4	30	10	1.0	18	1.3	SMA	115*15.5*11
QSDC-300-2400-30-20-S	0.3~2.4	30	20	1.0	18	1.3	SMA	115*15.5*11
QSDC-300-2400-30-30-S	0.3~2.4	30	30	1.0	18	1.3	SMA	115*15.5*11
QSDC-300-4000-50-30-S	0.3~4	50	30±1.5	1.0	12	1.4	SMA	186*20*11
QSDC-300-8000-20-20-S	0.3~8	20	20±1	1.3	18	1.35	SMA	152.4*18.54*12.7
QSDC-400-1560-30-10-S	0.4~1.56	30	10±1.5	1.1	20	1.3	SMA	115*15.5*11
QSDC-400-2700-K4-40-N	0.4~2.7	400	40±1.2	0.4	20	1.2	N	158*53*26
QSDC-400-3000-10-20-S	0.4~3	10	20±1	0.5	20	1.3	SMA	149*25*14
QSDC-400-3000-K3-50-S	0.4~3	300	50±2.5	0.5	20	1.2	SMA	150*25*10
QSDC-400-3900-K1-20-N	0.4~3.9	100	20±2	0.5	17	1.2	SMA&N	99*42*22.5
QSDC-400-18000-50-10-S	0.4~18	50	10±1.5	1.5	10	1.8	SMA	113*15*11
QSDC-400-18000-50-20-S	0.4~18	50	20±1.5	1.5	10	1.8	SMA	113*15*11
QSDC-400-20000-10-20-S	0.4~20	10	20±1.5	1.5	8	1.5	SMA	137*15.5*11
QSDC-450-2500-50-6-S	0.45~2.5	50	6±1	0.8	18	1.2	SMA	112*17*11
QSDC-450-6000-30-10-S	0.45~6	30	10	1.2	12	1.5	SMA	115*16*11
QSDC-450-6000-30-20-S	0.45~6	30	20	1.2	12	1.5	SMA	115*16*11
QSDC-450-6000-30-30-S	0.45~6	30	30	1.2	12	1.5	SMA	115*16*11
QSDC-500-1000-30-10-S	0.5~1	30	10	0.4	20	1.3	SMA	120*26*14
QSDC-500-1000-30-20-S	0.5~1	30	20	0.4	20	1.3	SMA	120*26*14
QSDC-500-1000-30-30-S	0.5~1	30	30	0.4	20	1.3	SMA	120*26*14
QSDC-500-2000-10-15-S	0.5~2	15	15±1	1.0	18	1.3	SMA	137*15.5*11
QSDC-500-2000-30-10-S	0.5~2	30	10	0.8	20	1.25	SMA	106*15.5*11

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size (mm)
QSDC-500-2000-30-20-S	0.5~2	30	20	0.4	20	1.25	SMA	106*15.5*11
QSDC-500-2000-30-30-S	0.5~2	30	30	0.3	20	1.25	SMA	106*15.5*11
QSDC-500-3000-K5-60-NS	0.5~3	500	60±2	0.4	16	1.4	SMA&N	50*44*26
QSDC-500-6000-50-20-S	0.5~6	50	20±1	0.6	18	1.25	SMA	113*15*11
QSDC-500-6000-K2-40-N	0.5~6	200	40±2	0.6	15	1.5	N	38.1*38.1*27.6
QSDC-500-6000-K3-40-N	0.5~6	300	40±2	0.6	15	1.5	N	38.1*38.1*27.6
QSDC-500-8000-50-10-S	0.5~8	50	10±1	1.2	15	1.4	SMA	113*15*11
QSDC-500-8000-50-20-S	0.5~8	50	20±1	1.2	12	1.5	SMA	113*15*11
QSDC-500-18000-20-20-S	0.5~18	20	20±1.5	2.0	10	1.7	SMA	115*16*11
QSDC-500-18000-30-10-S	0.5~18	30	10	1.8	10	1.7	SMA	115*16*11
QSDC-500-18000-30-20-S	0.5~18	30	20	1.8	10	1.7	SMA	115*16*11
QSDC-500-18000-30-30-S	0.5~18	30	30	1.8	10	1.7	SMA	115*16*11
QSDC-500-18000-50-20-N	0.5~18	50	20±0.6	1.0	15	1.4	N	116.5*23*17.5
QSDC-600-3000-K2-20-NS	0.6~3	200	20±1.2	0.7	16	1.35	SMA&N	120*26*22
QSDC-600-3000-K5-40-NS	0.6~3	500	40±1	0.35	16	1.5	SMA&N	80*40*22
QSDC-600-6000-50-10-S	0.6~6	50	10±1	1.0	15	1.3	SMA	112*17*12.7
QSDC-600-6000-50-30-S	0.6~6	50	30±1	0.5	15	1.3	SMA	100*15*11
QSDC-700-6000-50-20-N	0.7~6	50	20±1	0.7	16	1.3	N	125*20*20
QSDC-800-2500-K2-20-N	0.8~2.5	200	20±1	0.3	18	1.25	N	170.7*43*20
QSDC-800-2700-50-10-S	0.8~2.7	50	10±1	1.0	18	1.2	SMA	112*17*12.7
QSDC-800-6000-K4-20-NS	0.8~6	400	20±1	0.5	14	1.5	SMA&N	80*40*22
QSDC-910-920-K3-30-S	0.91~0.92	300	30±0.5	0.2	20	1.2	SMA	50*20*10
QSDC-1000-4000-20-10-S	1~4	20	10±1	0.6	20	1.3	SMA	73*15*11
QSDC-1000-4000-30-10-S	1~4	30	10	1.0	20	1.3	SMA	73*15*11
QSDC-1000-4000-30-20-S	1~4	30	20	1.0	20	1.3	SMA	73*15*11
QSDC-1000-4000-30-30-S	1~4	30	30	0.5	20	1.3	SMA	73*15*11
QSDC-1000-4000-50-10-S	1~4	50	10±1	0.8	20	1.3	SMA	73*15*11
QSDC-1000-4000-50-20-S	1~4	50	20±1	0.4	20	1.3	SMA	73*15*11
QSDC-1000-4000-50-10-N	1~4	50	10±1	0.8	20	1.3	N	83*20*10
QSDC-1000-4000-50-20-N	1~4	50	20±1	0.4	20	1.3	N	83*20*10
QSDC-1000-6000-K1-10-N	1~6	100	10±0.8	0.7	10	1.4	SMA	100*24*22
QSDC-1000-6000-K1-10-N	1~6	100	10±0.8	0.7	10	1.4	SMA	100*24*22
QSDC-1000-6000-K3-30-NS	1~6	300	30±1.5	0.6	16	1.35	SMA&N	100*26*22
QSDC-1000-8000-30-30-S	1~8	30	30±1.2	0.8	15	1.5	SMA	73*15*11
QSDC-1000-18000-30-10-S	1~18	30	10	1.5	10	1.6	SMA	90*15.5*11
QSDC-1000-18000-30-20-S	1~18	30	20	1.5	10	1.6	SMA	90*15.5*11
QSDC-1000-18000-30-30-S	1~18	30	30	1.5	10	1.6	SMA	90*15.5*11
QSDC-1000-26500-30-20-S	1~26.5	30	20±1.5	2.2	10	1.7	SMA	84*15*11
QSDC-1000-40000-30-10-K	1~40	30	10±1.2	2.8	10	1.7	2.92mm	84*15*11
QSDC-1000-40000-30-16-K	1~40	30	16±1.5	2.6	10	1.7	2.92mm	84*15*11
QSDC-1000-40000-30-20-K	1~40	30	20±1.2	2.8	10	1.7	2.92mm	84*15*12.7
QSDC-1000-44000-1-10-2M2	1~44	1	10	2.5	10	2	2.4mm	90.17*18.542*13.46

\*Size: Exclude connectors

Part Number	Freq. (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size (mm)
QSDC-1000-67000-20-10-V	1~67	20	10±3.5	3.8	8	1.9	1.85mm	62.9*16*12.7
QSDC-1290-1310-70-6-N	1.29~1.31	70	6±1	1.8	20	1.3	N	120*40*16.5
QSDC-1290-1310-70-10-N	1.29~1.31	70	10±1	0.8	20	1.3	N	120*40*16.5
QSDC-2000-2500-K5-40-NS	2~2.5	500	40±2	0.4	15	1.4	N&SMA	44*26*22
QSDC-2000-4000-50-10-S	2~4	50	10±1	1.0	18	1.3	SMA	43*15*11
QSDC-2000-4000-50-20-S	2~4	50	20±1	0.4	18	1.3	SMA	53*20*20
QSDC-2000-4000-50-30-S	2~4	50	30±1	0.4	18	1.3	SMA	43*15*11
QSDC-2000-4000-50-10-N	2~4	50	10±1	1.0	18	1.3	N	43*15*11
QSDC-2000-4000-50-20-N	2~4	50	20±1	0.4	18	1.3	N	53*20*20
QSDC-2000-4000-50-30-N	2~4	50	30±1	0.4	18	1.3	N	43*15*11
QSDC-2000-4000-K3-20-NS	2~4	300	20±1	0.4	18	1.35	SMA&N	44*26*22
QSDC-2000-4000-K4-40-N	2~4	400	40±1.5	0.5	10	1.3	SMA	50*50*19.5
QSDC-2000-4000-K5-50-NS	2~4	500	50±1.5	0.8	20	1.25	SMA&N	44*26*22
QSDC-2000-8000-50-6-S	2~8	50	6±1	0.2	18	1.3	SMA	43*15*11
QSDC-2000-8000-50-10-S	2~8	50	10±1	1.2	16	1.3	SMA	43*15*11
QSDC-2000-8000-50-30-S	2~8	50	30±1	0.4	20	1.2	SMA	43*15*11
QSDC-2000-8000-K5-30-NS	2~8	500	30±1	0.6	14	1.5	SMA&N	60*40*22
QSDC-2000-12000-30-10-S	2~12	30	10±1	1.1	12	1.5	SMA	51*16*11
QSDC-2000-18000-30-10-S	2~18	30	10	1.2	12	1.6	SMA	43*15*11
QSDC-2000-18000-30-20-S	2~18	30	20	1.0	12	1.6	SMA	43*15*11
QSDC-2000-18000-30-30-S	2~18	30	30	1.0	10	1.6	SMA	43*15*11
QSDC-2000-18000-K2-50-NS	2~18	200	50±2	0.6	10	1.6	SMA&N	86.7*30*43.4
QSDC-2000-40000-30-10-K	2~40	30	10±1.5	2	10	1.7	2.92mm	48*15*11
QSDC-2000-40000-30-16-K	2~40	30	16±1.2	1.5	10	1.6	2.92mm	48*15*11
QSDC-2000-40000-30-20-K	2~40	30	20±1.5	1.5	10	1.7	2.92mm	48*15*11
QSDC-2000-67000-10-16-V	2~67	10	16±1.4	3.5	8	2	1.85mm	62.9*15*11
QSDC-2000-67000-10-16-V	2~67	10	16±1.4	3.5	8	2	1.85mm	62.9*15*11
QSDC-2300-2600-K5-40-NS	2.3~2.6	500	40±0.5	0.4	20	1.25	N&SMA	44*26*22
QSDC-2500-6000-50-6-S	2.5~6	50	6±1	0.8	20	1.2	SMA	43*15*11
QSDC-3000-6000-10-20-S	3~6	10	20±1	0.5	18	1.3	SMA	43*15*11
QSDC-3400-4200-50-30-S	3.4~4.2	50	30±1	0.5	15	1.3	SMA	43*15*11
QSDC-3500-4500-10-20-S	3.5~4.5	10	20±1	0.5	20	1.3	SMA	43*15*11
QSDC-3800-4300-50-20-N	3.8~4.3	50	20±1	0.5	20	1.3	N	53*20*20
QSDC-4000-6000-K4-40-SN	4~6	400	40±1.5	0.6	10	1.3	SMA&N	50*50*19.5
QSDC-4000-8000-50-10-S	4~8	50	10±1	1.0	16	1.3	SMA	43*15*11
QSDC-4000-12000-50-6-S	4~12	50	6±1	1.2	12	1.5	SMA	33*15*11
QSDC-4000-16000-30-10-S	4~16	30	10±1.2	1.2	12	1.5	SMA	43*15*11
QSDC-4000-18000-20-10-S	4~18	20	10±1	1.0	12	1.5	SMA	33*15*11
QSDC-4000-18000-20-20-S	4~18	20	20±1	1.0	12	1.5	SMA	33*15*11
QSDC-4000-18000-20-30-S	4~18	20	30±1	1.0	10	1.5	SMA	33*15*11
QSDC-4000-30000-30-20-K	4~30	30	20±1	1.5	12	1.6	2.92mm	48*15*11
QSDC-6000-18000-20-30-S	6~18	20	30±1	1.0	10	1.5	SMA	33*15*11

\*Size: Exclude connectors.



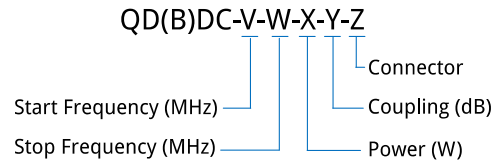
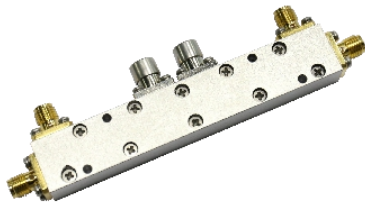
Part Number	Freq. (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size (mm)
QSDC-6000-18000-30-20-S	6~18	30	20±1	1.0	12	1.5	SMA	33*15*11
QSDC-6000-18000-50-10-S	6~18	50	10±1	1.0	12	1.5	SMA	33*15*11
QSDC-6000-18000-50-20-S	6~18	50	20±1	0.6	12	1.5	SMA	33*15*11
QSDC-6000-18000-50-30-S	6~18	50	30±1	0.6	12	1.5	SMA	33*15*11
QSDC-6000-18200-30-6-S	6~18.2	30	6±1	1.2	12	1.5	SMA	33*15*11
QSDC-6000-18200-30-10-S	6~18.2	30	10±1	1	12	1.5	SMA	33*15*11
QSDC-6000-18200-30-30-S	6~18.2	30	30±1	0.6	12	1.5	SMA	33*15*11
QSDC-6500-11500-20-20-S	6.5~11.5	20	20±1	1.0	12	1.5	SMA	33*15*11
QSDC-7000-7300-60-30-S	7~7.3	60	30±1	0.5	16	1.5	SMA	33*15*11
QSDC-7000-12400-30-10-S	7~12.4	30	10±1	1.2	15	1.3	SMA	33*15*11
QSDC-7000-12400-30-20-S	7~12.4	30	20±1	1.2	15	1.3	SMA	33*15*11
QSDC-8000-8400-20-10-N	8~8.4	20	10±1	1.0	12	1.6	N	47*22*19
QSDC-8000-8400-20-20-N	8~8.4	20	20±1	1.0	12	1.6	N	47*22*19
QSDC-8000-12000-40-15-S	8~12	40	15±1	0.8	12	1.5	SMA	43*15*11
QSDC-8000-12000-K1-30-N	8~12	100	30±1	0.4	10	1.4	N	60*30*24
QSDC-10750-12750-50-30-S	10.75~12.75	50	30±1	0.5	15	1.4	SMA	33*15*11
QSDC-12000-13000-10-6-S	12~13	10	6±1	0.8	12	1.5	SMA	56*15*11
QSDC-12000-18000-50-30-S	12~18	50	30±1	1.0	12	1.5	SMA	33*15*11
QSDC-12400-18000-50-10-S	12.4~18	50	10±1	0.8	12	1.4	SMA	33*15*11
QSDC-12400-18000-50-20-S	12.4~18	50	20±1	0.8	12	1.4	SMA	33*15*11
QSDC-14000-15000-50-10-S	14~15	50	10±1	0.6	15	1.4	SMA	33*15*11
QSDC-14000-15000-50-20-S	14~15	50	20±1	0.6	15	1.4	SMA	33*15*11
QSDC-18000-31000-30-20-K	18~31	30	20±1	1.4	12	1.6	2.92mm	26*15*11
QSDC-18000-40000-20-10-K	18~40	20	10±1	1.6	10	1.6	2.92mm	26*15*11
QSDC-18000-40000-20-20-K	18~40	20	20±1	1.6	10	1.6	2.92mm	26*15*11
QSDC-18000-40000-20-30-K	18~40	20	30±1	1.6	10	1.6	2.92mm	28*15*11
QSDC-20000-50000-10-10-2	20~50	10	10±1.2	1.8	10	1.9	2.4mm	26*15*11
QSDC-20000-50000-10-20-2	20~50	10	20±1.2	1.6	10	1.9	2.4mm	26*15*11
QSDC-20000-50000-10-30-2	20~50	10	30±1.2	1.2	8	1.9	2.4mm	26*15*11
QSDC-26000-30000-20-20-K	26~30	20	20±1	1.4	12	1.6	2.92mm	26*15*11

\*Size: Exclude connectors.

## Description

Dual directional coupler is a kind of four port RF device, which is the key device in microwave measurement such as reflectometer and RF network analyzer. It can be used to monitor the output power and frequency spectrum of the transmitter, test the reflected power from the transmitter to the antenna, monitor the matching of the antenna feeder system, and also be used for the power control of the transmitter. With detector and level indicator, it can be used as power meter.

**Features:** Broadband, High Power, Low Insertion Loss; **Applications:** Power Amplifier, Transmitter, Radar, Laboratory Test.



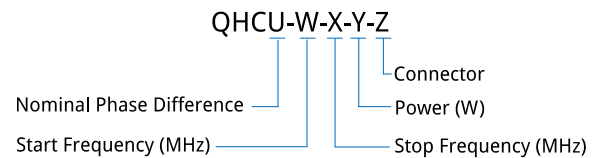
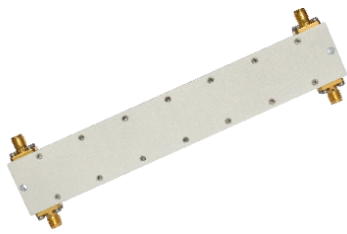
Part Number	Freq. (GHz)	Power (W)	Coupling (dB)	Insertion Loss (dB, max.)	Directivity (dB, min.)	VSWR (max.)	Connector	Size (mm)
QBDC-2000-4000-K4-40-NS	2-4	400	40±1.5	0.5	10	1.3	SMA&N	50*50*22.6
QBDC-4000-6000-K4-40-NS	4-6	400	40±1.5	0.6	10	1.3	SMA&N	50*50*22.6
QDDC-0.1-1000-K1-40-NS	0.0001~1	100	40±1.2	1	13	1.25	SMA&N	132*68*43
QDDC-0.5-32-K2-30-N	0.0005~0.032	200	30±1	0.2	20	1.1	N	51*50.8*22.35
QDDC-1-10-K15-20-S	0.001~0.01	150	20±0.5	0.2	20	1.2	SMA	51*50.8*22.35
QDDC-2-32-1K-40-NS	0.002~0.032	1000	40±1	0.5	20	1.2	SMA&N	120*50*30
QDDC-20-1000-K15-50-S	0.02~1	150	50±1	0.4	20	1.5	SMA	51*50.8*22.35
QDDC-25-1000-1K-50-NS	0.025~1	1000	50±1.5	0.5	15	1.2	SMA&N	120*55.9*30
QDDC-80-1000-1K-50-NS	0.08~1	1000	50±1	0.3	20	1.3	SMA&N	85*44*26
QDDC-200-400-1K-40-NS	0.2~0.4	1000	40±1	0.2	20	1.15	SMA&N	120*55.9*30
QDDC-300-8000-20-20-S	0.3~8	20	20±1	1.1	18	1.35	SMA	152.4*18.54*12.7
QDDC-400-450-20-40-S	0.4~0.45	20	40±1	0.3	20	1.3	SMA	288*27*15
QDDC-400-2500-K5-50-NS	0.4~2.5	500	50±1.2	0.3	18	1.3	SMA&N	85*44*26
QDDC-600-2700-K8-50-NS	0.6~2.7	800	50±1.2	0.3	20	1.3	SMA&N	85*44*26
QDDC-700-6000-50-10-S	0.7~6	50	10±1.2	2.2	12	1.4	SMA	202*16*11
QDDC-700-6000-50-30-S	0.7~6	50	30±1.5	1.2	10	1.4	SMA	202*16*11
QDDC-700-6000-K5-35-NS	0.7~6	500	35±1	0.5	12	1.7	SMA&N	92*38*25.4
QDDC-1000-6000-40-10-S	1~6	40	10±1	2.0	18	1.3	SMA	150*18*12
QDDC-1000-6000-K1-40-N	1~6	100	40±1.5	0.7	16	1.4	N	100*30*24
QDDC-1000-6000-50-10-NS	1~6	50	10±1	2.0	18	1.3	SMA&N	140*20*20
QDDC-1000-6000-K5-40-NS	1~6	500	40±1	0.5	12	1.7	SMA&N	92*38*25.4
QDDC-1900-2200-50-10-NS	1.9~2.2	50	10±1	1.5	20	1.2	SMA&N	140*20*20
QDDC-2000-4000-10-10-S	2~4	10	10±1	0.8	18	1.2	SMA	86*15*11
QDDC-2000-4000-K5-50-NS	2~4	500	50±1.5	0.4	20	1.25	SMA&N	44*26*22
QDDC-2000-18000-20-40-S	2~18	20	40±1.5	2.0	7	1.7	SMA	86*18*11
QDDC-4000-6000-10-10-S	4~6	10	10±1	0.8	18	1.2	SMA	86*15*11
QDDC-6000-18000-70-40-S	6~18	70	40±2.5	0.5	15	1.4	SMA	45*32*14
QDDC-6000-18000-K25-40-NS	6~18	250	40±1	0.5	10	1.7	SMA&N	38*37*25.4

\*Size: Exclude connectors.

## Description

Hybrid Coupler can continuously sample the transmission power along a certain direction of the transmission line, and can divide an input signal into two equal amplitude signals with 90 degrees or 180 degrees phase difference.

**Features:** Broadband, High Power, Low Insertion Loss; **Applications:** Amplifiers, Transmitter, Radar, Laboratory Test.



**Nominal Phase Difference: 180°(8), 90°(9)**

## Nominal Phase Difference: 90°

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connecto r	Size (mm)
QHC9-68-72-10-N	0.068~0.072	10	0.8	20	0.6	5	1.3	N	84*64*20
QHC9-100-140-10-S	0.1~0.14	10	0.5	18	0.7	5	1.3	SMA	67*60*13
QHC9-225-400-50-S	0.225~0.4	50	0.3	20	0.5	4	1.25	SMA	66*32*13
QHC9-400-500-10-S	0.4~0.5	10	0.5	20	0.5	3	1.3	SMA	62*26*13
QHC9-400-650-K8-N	0.4~0.65	800	0.5	16	0.6	5	1.35	N	410*102*36
QHC9-500-1000-50-S	0.5~1	50	0.3	22	0.5	2	1.25	SMA	84.5*13*11
QHC9-500-3000-10-S	0.5~3	10	1.1	20	0.9	7	1.3	SMA	153*25.4*11
QHC9-1000-4000-30-S	1~4	30	0.6	20	0.6	6	1.25	SMA	76*22*11
QHC9-1000-7000-20-S	1~7	20	0.9	18	0.4	4	1.4	SMA	74*25*11
QHC9-1500-2500-30-S	1.5~2.5	30	0.5	20	0.6	5	1.3	SMA	105*22*11
QHC9-2000-8000-20-S	2~8	20	0.8	18	0.8	8	1.4	SMA	60*25*11
QHC9-2000-8000-60	2~8	60	0.8	17	1	8	1.5	PIN	60*25*11
QHC9-2000-18000-30-S	2~18	30	2.2	18	1	5	1.45	SMA	60*25*11
QHC9-2000-40000-30-K	2~40	30	2.8	10	1.5	12	2	2.92mm	37*18*11
QHC9-2400-2500-K5-N	2.4~2.5	500	0.6	18	0.3	2.5	1.4	N	100*50*20
QHC9-2700-3500-K5-N	2.7~3.5	500	0.5	16	0.8	8	1.5	N	-
QHC9-3200-4000-30-S	3.2~4	30	0.5	20	0.6	2	1.3	SMA	45*17*11
QHC9-5700-5900-30-S	5.7~5.9	30	0.5	23	0.3	3	1.25	SMA	40*15*12
QHC9-10750-12250-30-S	10.75~12.25	30	0.8	16	0.7	8	1.5	SMA	22*34.7*11
QHC9-18000-40000-30-K	18~40	30	2.2	12	0.7	10	1.8	2.92mm	25.4*16*11
QHC9-26000-40000-30-K	26~40	30	2.2	12	0.7	10	1.8	2.92mm	25.4*16*11
QSHC9-800-4200-K1	0.8~4.2	100	0.8	15	1	8	1.5	SMD	45.72*10.16*4.6
QSHC9-1000-3000-K4	1~3	400	0.2	20	1	4	1.25	SMD	25.4*12.7*5.5
QDHC9-100-520-K2	0.1~0.52	200	0.45	17	0.75	5	1.3	Drop In	83.82*38.1*7.32
QDHC9-100-520-K8	0.1~0.52	800	0.42	16	0.75	5	1.3	Drop In	83.82*38.1*9.32

\*Size: Exclude connectors.

**Nominal Phase Difference: 180°**

Part Number	Freq. (GHz)	Power (W)	Insertion Loss (dB, max.)	Isolation (dB, min.)	Amplitude Bal. (±dB, max.)	Phase Bal. (±°, max.)	VSWR (max.)	Connector	Size (mm)
QHC8-106-176-30-S	0.106~0.176	30	1.2	18	0.8	10	1.4	SMA	152*120*13
QHC8-225-400-30-S	0.225~0.4	30	1	18	0.8	10	1.4	SMA	96*96*13
QHC8-1000-3000-2	1~3	2	1	18	0.7	10	1.4	SMD	67*46*10
QHC8-1200-2700-10-S	1.2~2.7	10	0.8	20	0.8	10	1.35	SMA	65*60*14
QHC8-1500-2500-10-S	0.15~0.25	10	0.5	20	0.6	5	1.4	SMA	64*60*13
QHC8-2000-6000-30-S	2~6	30	1.5	18	0.9	11	1.5	SMA	82*36*11
QHC8-3200-4000-10-S	3.2~4	10	0.5	18	0.6	5	1.4	SMA	60*45*13
QHC8-4000-10000-30-S	4~10	30	1.5	18	0.8	10	1.5	SMA	48*36*11

\*Size: Exclude connectors.

## Description

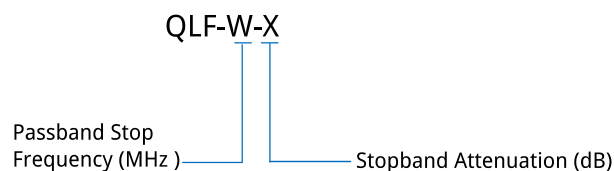
In various applications, it is often concerned to change the relative size of each frequency component in a signal, or eliminate all the requirements of some frequency components. Such a process is called filtering. The filter is widely used and has universal significance.



Low pass filter is a filter that attenuates or blocks a higher frequency through a lower frequency

**Features:** Broadband, High Power, Low Insertion Loss

**Applications:** Amplifiers, Broadcast, Communication, Laboratory Test.



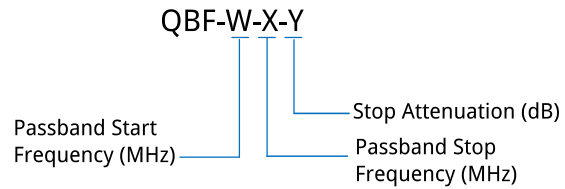
Part Number	Passband (GHz)	IL (dB, max.)	VSWR (max.)	Stopband Attenuation (dB)	Connector
QLF-200-2400-60	0.2~2.4	5	1.5	60@3.6GHz	SMA
QLF-2186-30	1.5~2.186	2	1.6	30@2.37~3GHz	SMA
QLF-2500-65	DC~2.5	3	2	65@3-13GHz	N
QLF-2700-90	DC~2.7	2	2	90@4.5-8.4GHz	SMA
QLF-4000-50	DC~4	0.8	1.5	50@8GHz	SMA
QLF-4000-60	DC~4	1.5	1.3	60@4.5~12.3GHz	SMA
QLF-4800-35	DC~4.8	1.5	2	35@6GHz	SMA
QLF-5000-40	DC~5	2	2	40@6-25GHz	SMA
QLF-6000-20	0.5~6	2	1.8	20@6.5GHz	SMA
QLF-6500-60	DC~6.5	1.5	1.3	60@7.27~15.3GHz	SMA
QLF-8000-40	DC~8	2	2	40@9~25GHz	SMA
QLF-9000-60	DC~9	1	1.6	60@14~17GHz	SMA
QLF-10000-40	DC~10	2	2	40@13-18GHz	SMA
QLF-11000-35	DC~11	2	2	35@12GHz	2.92mm
QLF-11500-45	DC~11.5	2	2	45@12.8-13.3GHz	2.92mm
QLF-11500-40	DC~11.5	2	1.5	40@12.3-13.3GHz	2.92mm
QLF-12000-40	DC~12	2	2	40@13.5-25GHz	SMA
QLF-13000-40	DC~13	1.5	2	40@15-25GHz	2.92mm
QLF-15000-40	DC~15	2	2	40@18-23GHz	2.92mm
QLF-16000-40	DC~16	2	2	40@18-25GHz	SMA
QLF-18000-40	DC~18	2	2	40@20-38GHz	2.92mm
QLF-18000-50	DC~18	3	1.6	50@19.1-26GHz	SMA
QLF-20000-60	DC~20	1	2	60@23~40GHz	2.92mm
QLF-25000-40	DC~25	2	2	40@28-30GHz	2.92mm
QLF-28000-30	DC~28	2	2	30@30-38GHz	2.4mm

## Description

Band pass filter is a filter that passes through a certain frequency band and attenuates the frequency band that is both higher and lower than the one to pass through.

**Features:** Broadband, High Power, Low Insertion Loss

**Applications:** Amplifiers, Broadcast, Communication, Laboratory Test.



Part Number	Passband (GHz)	IL (dB, Max.)	VSWR (Max.)	Stopband Attenuation (dB)		Connectors
QBF-40-100-30	0.04~0.1	1.5	1.5	30@DC~0.03GHz	30@0.118~0.4GHz	SMA
QBF-50-250-30	0.05~0.25	1.2	1.8	30@DC~0.04GHz	30@0.31~0.5GHz	SMA
QBF-110-170-30	0.11~0.17	2	1.5	30@DC~0.08GHz	30@0.2~0.4GHz	SMA
QBF-245-355-25	0.245~0.235	2	1.5	38@DC~0.2GHz	25@0.4~0.9GHz	SMA
QBF-273-277-50	0.273~0.277	2.5	2	50@DC~0.26GHz	50@0.29~1GHz	SMD
QBF-300-600-30	0.3~0.6	1.8	1.5	30@0.26GHz	30@0.65GHz	SMA
QBF-310-443-50	0.31~0.443	1	1.5	50@DC~0.1765GHz	50@0.5765~1.5GHz	SMA
QBF-400-700-50	0.4~0.7	2.5	1.5	50@DC~0.3GHz	50@0.85~1GHz	2.92mm
QBF-430-450-30	0.43~0.45	1	1.22	30@DC~0.425GHz	30@0.455~1GHz	SMA
QBF-497.5-502.5-40	0.4975~0.5025	1.2	1.22	40@DC~0.493GHz	40@0.507~1GHz	SMA
QBF-585-615-60	0.585~0.615	0.5	2	60@0.45GHz	60@0.75GHz	SMA
QBF-606-678-40	0.606~0.678	1.5	1.5	40@DC~0.5GHz	30@0.825~3GHz	SMA
QBF-710-730-45	0.71~0.73	2.5	1.3	45@0.695GHz	50@0.735GHz	SMA
QBF-800-1200-45	0.8~1.2	1	1.8	45@0.55GHz	45@1.45GHz	SMA
QBF-800-1600-40	0.8~1.6	5	2.2	40@0.75GHz	40@1.65GHz	SMA
QBF-818-918-45	0.818~0.918	3	1.5	45@0.668GHz	45@1.068GHz	SMA
QBF-818-1000-45	0.818~1	3	1.5	45@0.709GHz	45@1.109GHz	SMA
QBF-859-959-45	0.859~0.959	3	1.5	45@0.709GHz	45@1.109GHz	SMA
QBF-860-880-60	0.86~0.88	1.5	1.5	60@DC~0.8375GHz	60@0.9025~2GHz	SMA
QBF-890-910-60	0.89~0.91	1.5	1.5	60@DC~0.8675GHz	60@0.9325~2GHz	SMA
QBF-920-940-60	0.92~0.94	1.5	1.5	60@DC~0.8975GHz	60@0.9625~2GHz	SMA
QBF-1000-1700-50	1~1.7	1.7	1.7	50@DC~0.9GHz	60@1.8~2.2GHz	2.92mm
QBF-1050-2250-30	1.05~2.25	5	1.5	30@0.3GHz	60@3GHz	SMA
QBF-1100-1600-50	1.1~1.6	2.5	1.5	50@0.9GHz	50@1.8GHz	SMA
QBF-1200-1400-50	1.2~1.4	0.3	1.35	50@0.8GHz	50@2~6GHz	N
QBF-1390-1410-80	1.39~1.41	2	1.3	80@1.35GHz	80@1.47GHz	SMA
QBF-1400-1800-60	1.4~1.8	2	1.5	60@DC~1.3GHz	60@1.9~3GHz	SMA
QBF-1500-1600-45	1.5~1.6	3	1.5	45@1.35GHz	45@1.75GHz	SMA
QBF-1518-1553-40	1.518~1.553	3	1.5	40@0.1GHz	40@0.5355&2.5355GHz	Pin
QBF-1640-1675-40	1.64~1.675	3	1.5	40@0.1GHz	40@0.6575&2.6575GHz	Pin
QBF-1800-2200-45	1.8~2.2	1.2	1.5	45@1.55GHz	45@2.45GHz	SMA
QBF-1950-2050-40	1.95~2.05	2	1.5	40@1.9GHz	40@2.1GHz	SMA
QBF-1980-2010-80	1.98~2.01	1.5	1.5	80@DC~1.82GHz	80@2.17~2.2GHz	SMA
QBF-2000-3000-50	2~3	1	1.5	50@DC~1.78GHz	50@3.22~5GHz	SMA
QBF-2000-3800-50	2~3.8	1.7	1.7	50@DC~1.7GHz	50@4.1~5GHz	2.92mm
QBF-2000-4000-60	2~4	1	1.6	60@1.5GHz	60@4.5GHz	SMA

Part Number	Passband (GHz)	IL (dB, Max.)	VSWR (Max.)	Stopband Attenuation (dB)		Connectors
QBF-2025-2085-40	2.025~2.085	1	1.3	40@2.2~2.3GHz	-	SMA
QBF-2025-2120-50	2.025~2.12	2	1.3	50@1.95GHz	50@2.2~2.3GHz	SMA
QBF-2200-2800-30	2.2~2.8	1	2	30@2GHz	30@3GHz	SMA
QBF-2240-2280-30	2.24~2.28	1.1	1.25	30@2.22~2.3GHz	-	SMA&N
QBF-2300-2500-45	2.3~2.5	3	1.5	45@2.05GHz	45@2.75GHz	SMA
QBF-2400-2500-35	2.4~2.5	1.5	1.5	35@DC~2.2GHz	35@2.7~5GHz	SMA
QBF-2400-2500-50	2.4~2.5	1	1.3	50@DC~2.05GHz	50@2.85~5GHz	SMA
QBF-2400-3600-30	2.4~3.6	1	1.5	30@2GHz	30@4GHz	SMA
QBF-2500-2700-30	2.5~2.7	1.3	1.25	30@DC~2.45GHz	40@2.75~6GHz	SMA
QBF-2526.5-2579.5-40	2.5265~2.5795	1	1.5	40@2.3GHz	40@2.7GHz	SMA
QBF-2573.5-2626.5-40	2.5735~2.6265	0.8	1.3	40@2.5435GHz	40@2.6565GHz	SMA
QBF-2613.5-2666.5-40	2.6135~2.6665	0.8	1.3	40@2.5835GHz	40@2.6965GHz	SMA
QBF-2700-3500-60	2.7~3.5	0.9	1.7	60@2.4GHz	60@3.8GHz	SMA
QBF-3000-4300-50	3~4.3	1	1.5	50@DC~2.5GHz	50@5~7GHz	SMA
QBF-3400-3600-30	3.4~3.6	1.5	1.25	30@DC~3.35GHz	30@3.65~8GHz	SMA
QBF-3800-6800-60	3.8~6.8	1	1.7	60@DC~2.92GHz	60@8.16~9GHz	SMA
QBF-4000-6000-70	4~6	2	2	70@DC~3.6GHz	60@6.38~8GHz	SMA
QBF-4000-6000-40	4~6	1	1.5	40@3.4GHz	40@7GHz	SMA
QBF-4300-8200-50	4.3~8.2	1.5	1.7	50@DC~3.7GHz	50@8.8~10GHz	2.92mm
QBF-5000-6000-35	5~6	1.5	1.5	35@DC~4.6GHz	35@6.4~10GHz	SMA
QBF-5000-6000-35-1	5~6	1.8	1.8	35@DC~4.9GHz	35@6.1~12GHz	SMA
QBF-5600-6000-60	5.6~6	0.9	1.5	80@5.05GHz	60@6.15GHz	SMA
QBF-5640-5660-50	5.64~5.66	0.6	1.3	50@DC~5GHz	50@6.3~18GHz	SMA
QBF-5700-5900-45	5.7~5.9	1.8	1.5	45@5.5GHz	45@6.1GHz	SMA
QBF-5841-6249-50	5.841~6.249	1	1.5	50@DC~4.85GHz	50@7.15~15GHz	SMA
QBF-6000-8192-20	6~8.192	3	1.8	20@5.7GHz	20@8.5GHz	SMA
QBF-6800-7800-40	6.8~7.8	2	1.5	40@6.2GHz	40@8.4GHz	SMA
QBF-6800-9800-60	6.8~9.8	1	1.5	60@DC~5.23GHz	60@11.76~15GHz	SMA
QBF-6867.2-7500-30	6.8672~7.5	2	1.5	10@6.5925GHz	30@5~6.3288GHz	Pin
QBF-7000-7400-40	7~7.4	1.2	1.5	40@DC~6.76GHz	40@7.64~10GHz	SMA
QBF-7300-8300-40	7.3~8.3	2	1.5	40@6.7GHz	40@9GHz	SMA
QBF-7400-12600-40	7.4~12.6	1.5	1.6	40@DC~6GHz	40@14~18GHz	SMA
QBF-7650-8350-50	7.65~8.35	3	1.5	50@7.15GHz	50@8.5GHz	SMA
QBF-7715-8695-80	7.715~8.695	3	1.5	80@7.5GHz	80@8.91GHz	SMA
QBF-8000-11000-45	8~11	0.65	1.8	45@5GHz	45@16~22GHz	SMA
QBF-8000-12000-30	8~12	1	1.8	45@7GHz	30@13~20GHz	SMA
QBF-8150-8250-40	8.15~8.25	3	1.5	40@8.1GHz	40@8.3GHz	SMA
QBF-8192-16384-20	8.192~16.384	3	1.8	20@7.1GHz	20@17.5GHz	SMA
QBF-8400-9600-30	8.4~9.6	2	1.5	30@DC~8GHz	30@10~18GHz	SMA
QBF-8500-9500-40	8.5~9.5	2	1.5	40@7.6GHz	40@10.3GHz	SMA
QBF-8500-16500-50	8.5~16.5	1.5	1.8	50@DC~7.2GHz	50@17.8~19GHz	2.92mm
QBF-8700-12800-35	8.7~12.8	0.5	1.5	25@8GHz	35@14GHz	SMA
QBF-9000-10000-40	9~10	2	1.5	40@8.3GHz	40@10.6GHz	SMA

Part Number	Passband (GHz)	IL (dB, Max.)	VSWR (Max.)	Stopband Attenuation (dB)		Connectors
QBF-9000-11700-30	9~11.7	1	1.25	45@DC~8.1&12.3~12.6GHz	30@8.1~8.4&12.6~25GHz	SMA
QBF-9000-14000-40	9~14	1.5	1.8	40@DC~8GHz	40@15~23GHz	SMA
QBF-9250-10750-60	9.25~10.75	1.2	1.7	60@8.9GHz	60@11.1GHz	SMA
QBF-9400-10600-30	9.4~10.6	1.5	1.5	30@9GHz	30@11GHz	SMA
QBF-9800-12800-60	9.8~12.8	1	1.22	60@DC~7.54GHz	60@15.36~22GHz	SMA
QBF-10200-10600-30	10.2~10.6	1.5	1.5	30@10GHz	30@10.8GHz	SMA
QBF-10200-10800-30	10.2~10.8	1.5	1.5	30@10GHz	30@11GHz	SMA
QBF-10200-12300-90	10.2~12.3	1	1.5	90@DC~7.5GHz	90@15.52~20GHz	SMA
QBF-10425-10575-30	10.425~10.575	0.6	1.3	30@10.2GHz	30@10.8GHz	SMA
QBF-11487-12000-30	11.487~12	2	1.5	10@11.0275GHz	30@9~10.5864GHz	Pin
QBF-12000-18000-50	12~18	1	1.2	50@8.2GHz	50@20.8GHz	SMA
QBF-12700-13300-40	12.7~13.3	1.5	1.5	40@12.3GHz	40@13.7GHz	SMA
QBF-12800-15800-60	12.8~15.8	1	1.22	60@DC~9.85GHz	60@18.96~23GHz	SMA
QBF-14000-18000-75	14~18	0.7	1.8	75@12GHz	75@20GHz	SMA
QBF-14700-15300-40	14.7~15.3	1.3	1.5	40@DC~14.46GHz	40@15.54~18GHz	SMA
QBF-15000-16000-40	15~16	2	1.5	40@DC~14.5GHz	40@16.5~18GHz	SMA
QBF-15900-16500-40	15.9~16.5	1.3	1.5	40@DC~15.66GHz	40@16.74~18GHz	SMA
QBF-16000-16200-40	16~16.2	1.5	1.5	40@DC~15.76GHz	40@16.44~18GHz	SMA
QBF-16384-24576-20	16.384~24.576	3	1.8	20@15GHz	20@26GHz	SMA
QBF-18000-20000-30	18~20	2	1.5	30@DC~17.2GHz	30@20.8~30GHz	2.92mm
QBF-18000-23000-50	18~23	1	1.3	50@DC~17GHz	50@24~36GHz	SMA
QBF-18000-25000-80	18~25	1.5	1.8	80@DC~14GHz	85@29~35GHz	2.92mm
QBF-18000-26500-60	18~26.5	2	1.8	60@DC~15GHz	60@29.5~37GHz	2.92mm
QBF-20600-25000-60	20.6~25	2	1.8	60@18.8GHz	60@26.8GHz	2.92mm
QBF-21000-28000-50	21~28	1	1.6	65@DC~19GHz	50@30~35GHz	2.92mm
QBF-21500-22500-70	21.5~22.5	2	1.3	70@DC~20.9GHz	70@23.1~40GHz	SMA
QBF-23000-26500-60	23~26.5	1.5	1.8	60@DC~21.3GHz	60@28.5~40GHz	2.92mm
QBF-23000-30000-85	23~30	1.5	1.5	85@19GHz	85@34GHz	2.92mm
QBF-24000-26000-35	24~26	2	1.5	35@DC~23GHz	35@27~40GHz	2.92mm
QBF-24000-27800-60	24~27.8	2	1.5	60@DC~22.4GHz	60@30~40GHz	2.92mm
QBF-24000-29500-10	24~29.5	2	1.5	10@23GHz	10@30.5GHz	2.92mm
QBF-24000-33000-60	24~33	2	1.8	60@DC~21GHz	60@37~40GHz	2.92mm
QBF-24000-34000-40	24~34	1.5	1.8	40@DC~20GHz	40@37~55GHz	2.92mm
QBF-24750-27750-66	24.75~27.75	1	1.4	70@23.83GHz	66@28.67GHz	2.92mm
QBF-25500-29500-60	25.5~29.5	1.5	1.8	60@DC~23.5GHz	60@31.5~40GHz	2.92mm
QBF-26000-27000-60	26~27	1	1.6	60@25GHz	60@28GHz	2.92mm
QBF-26000-28000-60	26~28	2	1.5	60@DC~23GHz	60@31~40GHz	2.92mm
QBF-26300-26900-40	26.3~26.9	0.6	1.5	60@24GHz	40@30GHz	2.92mm
QBF-26300-29700-60	26.3~29.7	2	1.5	60@DC~24.8GHz	60@32~40GHz	2.92mm
QBF-26400-33000-60	26.4~33	2	1.8	60@DC~24GHz	60@37~40GHz	2.92mm
QBF-27485-31315-50	27.485~31.315	2	1.5	60@26GHz	50@32.3GHz	2.92mm
QBF-27500-28500-60	27.5~28.5	1	1.6	60@26.6GHz	60@29.5GHz	2.92mm
QBF-27500-31000-40	27.5~31	3	1.5	40@27GHz	40@31.5GHz	2.92mm



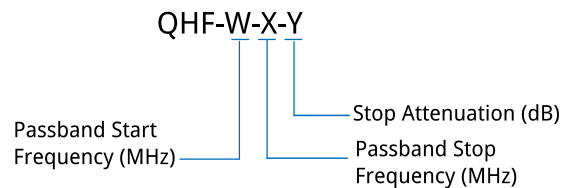
Part Number	Passband (GHz)	IL (dB, Max.)	VSWR (Max.)	Stopband Attenuation (dB)		Connectors
QBF-27700-28300-60	27.7~28.3	1.2	1.6	60@DC~25.7GHz	60@30.3~36GHz	2.92mm
QBF-32500-33500-60	32.5~33.5	1	1.6	60@31.5GHz	60@34.5GHz	2.92mm
QBF-33000-40000-85	33-40	1	1.5	85@30GHz	85@43GHz	2.92mm
QBF-34500-34600-50	34.5~34.6	3.4	1.3	50@DC~34.05GHz	50@35.05~43GHz	2.92mm
QBF-36800-40200-58	36.8~40.2	2	1.5	58@DC~35.2GHz	58@42~67GHz	2.92mm
QBF-38250-38750-30	38.25~38.75	3.49	1.5	30@37.95GHz	30@39.05GHz	2.92mm
QBF-39700-40300-60	39.7~40.3	1.5	1.6	60@DC~37.7GHz	60@42.3~50GHz	2.92mm
QBF-43500-45500-50	43.5~45.5	3	2	50@42.8GHz	50@46.2GHz	2.4mm
QBF-43500-49500-20	43.5~49.5	1.5	1.6	20@41.5GHz	20@51.5GHz	2.4mm
QBF-46000-52000-50	46~52	2	1.5	70@30~40GHz	50@DC~21GHz	2.4mm
QBF-58000-62000-35	58~62	1	1.5	35@55GHz	35@65GHz	1.85mm

## Description

High pass filter is a kind of filter that attenuates or blocks the lower frequency by high frequency.

**Features:** Broadband, High Power, Low Insertion Loss

**Applications:** Amplifiers, Broadcast, Communication, Laboratory Test.



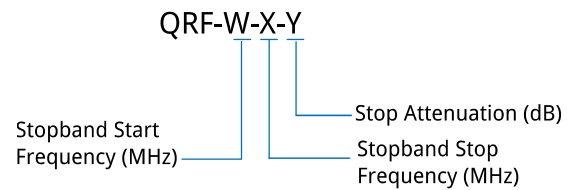
Part Number	Passband (GHz)	IL (dB, Max.)	VSWR (Max.)	Stopband Attenuation (dB)	Connectors
QHF-380-1000-30	0.38~1	2.5	1.7	30@DC~0.35GHz	SMA
QHF-1300-7000-40	1.3-7	2	2	40@0.915GHz	SMA
QHF-1500-9000-60	1.5-9	3	2	60@1GHz	SMA
QHF-2000-13000-40	2-13	3	2	40@1.5GHz	N
QHF-2500-18000-60	2.5-18	3	2	60@1.76GHz	SMA
QHF-2800-15000-40	2.8-15	2	2	40@1.99GHz	SMA
QHF-3000-13000-65	3-13	3	2	65@2.5GHz	N
QHF-4000-10000-50	4-10	1.5	2	50@1.3GHz	SMA
QHF-4000-15000-40	4-15	2	2	40@2.7GHz	SMA
QHF-4000-18000-15	4-18	3	2	15@3GHz	SMA
QHF-4000-21000-20	4-21	2.5	2	20@3GHz	SMA
QHF-5480-18000-50	5.48~18	0.9	2	50@DC~3.5GHz	SMA
QHF-6000-15000-40	6-15	2	2	40@3.9GHz	SMA
QHF-7000-24000-60	7-24	2	1.5	60@DC~6.3GHz	SMA
QHF-7500-24500-60	7.5-24.5	2	1.5	60@DC~6.77GHz	SMA
QHF-10000-18000-50	10-18	1.5	2	50@1.3GHz	SMA
QHF-11000-42000-60	11~42	3.5	2.2	60@DC~10GHz	2.92mm
QHF-18000-40000-35	18-40	2	2.3	35@17.5GHz	2.92mm
QHF-22000-40000-70	22-40	3	2	70@18GHz	2.92mm
QHF-26500-40000-60	26.5-40	3	2	60@19GHz	2.92mm
QHF-33000-60000-40	33-60	2	2	40@30GHz	1.85mm

## Description

Band reject filter is to block a certain frequency band filter.

**Features:** Broadband, High Power, Low Insertion Loss

**Applications:** Amplifiers, Broadcast, Communication, Laboratory Test.



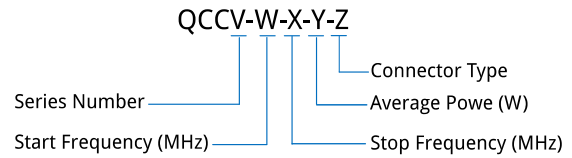
Part Number	Stopband (MHz)	Stopband Attenuation (dB)	Passband (MHz)	Passband (MHz)	IL (dB, Max.)	VSWR (Max.)	Connectors
QRF-600-700-45	600-700	45	DC-500	800-2500	2	1.8	SMA
QRF-703-748-50	703-748	50	DC-683	768-4000	2	2	N
QRF-758-803-40	758-803	40	DC-743	818-3000	2.5	2	SMA
QRF-791-821-60	791-821	60	DC-781	831-2500	3	-	N
QRF-815-880-45	815-880	45	DC-780	920-1500	2.5	-	SMA
QRF-824-849-40	824-849	40	DC-814	859-3500	2	-	N
QRF-880-915-40	880-915	40	DC-870	925-3500	2	-	N
QRF-930-960-55	930-960	55	DC-910	975-3000	3	2	SMA
QRF-1240-1260-50	1240-1260	50	DC-1230	1270-4000	2	2	SMA
QRF-1350-1450-50	1350-1450	50	DC-1300	1500-2000	1	2	SMA
QRF-1447-1467-60	1447-1467	60	DC-1422	1492-5000	3	2	N
QRF-1550-1610-60	1550-1610	60	100-400	2200-2300	1	2	N
QRF-1710-1785-40	1710-1785	40	DC-1690	1800-3500	2	2	N
QRF-1785-1805-40	1785-1805	40	DC-1755	1815-5200	2	2	N
QRF-1805-1880-40	1805-1880	40	DC-1755	1935-8000	2	2	SMA
QRF-1805-1880-40-1	1805-1880	40	DC-1790	1895-5100	3	1.5	SMA
QRF-1805-1880-60	1805-1880	60	DC-1775	1910-4500	3	2	N
QRF-1850-1910-40	1850-1910	40	DC-1830	1930-3500	2	2	N
QRF-1805-1925-60	1805-1925	60	DC-1755	1975-5000	2	1.5	SMA
QRF-1880-1920-65	1880-1920	65	DC-1855	1945-2500	3	2	SMA
QRF-2000-2300-50	2000-2300	50	DC-1900	2400-5100	1.5	1.8	SMA
QRF-2110-2170-60	2110-2170	60	DC-2070	2210-5800	3	2	N
QRF-2300-2400-60	2300-2400	60	DC-2234	2480-4000	2.5	2	SMA
QRF-2300-2675-50	2300-2675	50	DC-2200	2775-6200	1.5	1.8	SMA
QRF-2400-2483.5-30	2400-2483.5	30	DC-2345	2538-15000	3	2	SMA
QRF-2400-2500-50	2400-2500	50	DC-2350	2550-5500	1.5	1.5	SMA
QRF-2496-2590-40	2496-2590	40	DC-2300	2700-4000	1.5	2	SMA
QRF-2500-2570-60	2500-2570	60	10-2450	2600-6000	1	2	SMA
QRF-2500-2690-40	2500-2690	40	DC-2481	2705-3000	3.2	3	SMA
QRF-2570-2620-55	2570-2620	55	DC-2555	2635-4000	2	2	SMA
QRF-2575-2615-50	2575-2615	50	DC-2570	2620-3000	5	2	N
QRF-2575-2615-60	2575-2615	60	DC-2570	2620-6000	6	2	SMA
QRF-2620-2690-60	2620-2690	60	DC-2570	2740-10000	2	2	SMA
QRF-3300-3800-40	3300-3800	40	DC-3270	3830-6500	2	2	SMA
QRF-3300-3800-60	3300-3800	60	DC-3050	4050-15000	2.5	2	SMA
QRF-3400-3600-50	3400-3600	50	DC-3300	3700-8000	2	1.7	SMA

Part Number	Stopband (MHz)	Stopband Attenuation (dB)	Passband (MHz)	Passband (MHz)	IL (dB, Max.)	VSWR (Max.)	Connectors
QRF-3420-3700-60	3420-3700	60	DC-3270	3850-15000	2.5	2	SMA
QRF-4200-4400-60	4200-4400	60	DC-3800	4800-18000	2	2	SMA
QRF-4800-4900-55	4800-4900	55	DC-4720	4980-11000	2	1.7	SMA
QRF-5850-5925-50	5850-5925	50	DC-5620	6170-18000	2	3	SMA
QRF-5925-6425-50	5925-6425	50	DC-5700	6650-18000	2	3	SMA
QRF-5925-7125-50	5925-7125	50	DC-5325	7725-18000	2	3	SMA
QRF-6425-6525-50	6425-6525	50	DC-6300	6650-14000	2	1.7	SMA
QRF-6525-6875-50	6525-6875	50	DC-6350	7050-14200	2	1.7	SMA
QRF-6875-7125-50	6875-7125	50	DC-6700	7300-15000	2	1.7	SMA
QRF-14000-14500-50	14000-14500	50	13500-14000	14500-15000	2	-	2.92mm

## Description

Circulator, including coaxial circulator and drop-in circulator, is a multi port device which transmits the forward-travelling wave from one port to the next port in the direction determined by the static bias magnetic field. It is a non-reversible device with several terminals.

**Features:** Broadband, High Power, Low insertion Loss; **Applications:** Wireless, Radar, Laboratory Test.

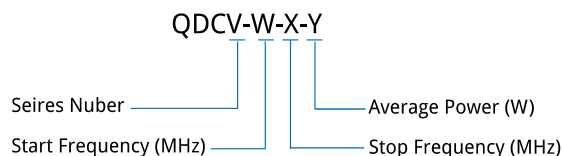
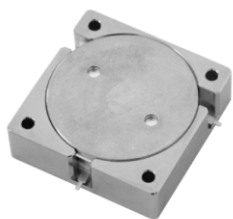


**Examples:** QCC6060H series Circulator, 55~60MHz, 100W, SMA female, specify QCC6060H-55-60-K1-S.

Part Number	Freq. (GHz)	Bandwidth (MHz, max.)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Avg. Power (W, max.)	Connector	Temperature (°C)	Size (mm)
QCC6060H	0.02~0.4	175	2	18	1.3	100	SMA, N	-20~+60	60*60*25.5
QCC6466H	0.02~0.4	175	2	18	1.3	100	SMA, N	-20~+70	64*66*22
QCC6466E	0.13~0.19	30	0.6	10	1.3	500	SMA, N	-20~+70	64*66*22
QCC8080E	0.15~0.89	80	0.6	19	1.25	1000	7/16DIN	-30~+75	80*80*34
QCC5258E	0.16~0.33	70	0.7	18	1.3	400	SMA, N	-30~+70	52*57.5*22
QCC4550X	0.3~1.1	300	0.6	18	1.3	400	SMA, N	-30~+70	45*49*18
QCC3538X	0.3~1.85	500	0.7	18	1.35	300	SMA, N	-30~+70	35*38*15
QCC3033X	0.7~3	600	0.6	15	1.45	200	SMA	-30~+70	30*33*15
QCC3232X	0.7~3	600	0.6	15	1.45	200	SMA, N	-30~+70	32*32*15
QCC3434E	0.7~3	600	0.6	15	1.45	200	SMA, N	-30~+70	34*34*22
QCC2528B	0.8~4	400	0.4	20	1.25	200	SMA, N	-30~+70	25.4*28.5*15
QCC6466K	0.95~2	1050	0.65	16	1.4	100	SMA, N	-10~+60	64*66*26
QCC2025B	1.3~4	400	0.4	20	1.25	100	SMA	-30~+70	20*25.4*15
QCC5050A	1.5~3	1500	0.7	17	1.4	100	SMA, N	0~+60	50.8*49.5*19
QCC2025X	2.4~2.483	83	0.3	25	1.2	100	SMA	-20~+85	20*25.4*14
QCC2528C	2.7~6.2	3500	0.8	16	1.4	200	SMA, N	0~+60	25.4*28*14
QCC3234A	2~4	2000	0.6	18	1.3	100	SMA, N	0~+60	32*34*21
QCC1523C	3.6~7.2	1400	0.5	18	1.35	60	SMA	-10~+60	15*22.5*13.8
QCC2123B	4~8	4000	0.6	18	1.35	50	SMA, N	-10~+60	21*22.5*15
QCC1623C	5.725~5.85	125	0.3	23	1.2	100	SMA	-20~+80	16*23*13
QCC1620B	6~18	12000	1.5	10	1.9	30	SMA	0~+60	16*20.3*14
QCC1319C	7~12.7	4000	0.5	18	1.3	30	SMA	-10~+60	13*19*12.7
QCC1622B	8~18	10000	1.4	12	1.6	30	SMA	0~+60	16*21.5*14
QCC1220C	9~16.5	2200	0.5	19	1.3	30	SMA	-10~+60	12*20*13
QCC1519A	18~26.5	8500	0.8	16	1.4	5	2.92mm	-30~+70	15*19*13
QCC1215A	26.5~40	13500	1.3	12	1.7	5	2.92mm	-30~+70	12*15*12

\*Size: Exclude connectors.

\*Note: The connector is SMA, and the maximum average power can only reach 100W.



**Examples:** QDC6060H series Circulator, 70~75MHz, 50W, specify  
QDC6060H-70-75-50.

Part Number	Freq. (GHz)	Bandwidth (MHz, max.)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Avg. Power (W, max.)	Temperature (°C)	Size (mm)
QDC6060H	0.02~0.4	175	2	18	1.3	100	-10~+60	60*60*25.5
QDC6466H	0.02~0.4	175	2	18	1.3	100	-10~+60	64*66*22
QDC5050X	0.15~0.33	70	0.7	18	1.3	400	-30~+70	50.8*50.8*14.8
QDC4545X	0.3~1	300	0.5	18	1.3	400	-30~+70	45*45*13
QDC3538X	0.3~1.85	500	0.7	18	1.35	300	-30~+70	35*35*11
QDC3838X	0.3~1.85	106	0.4	20	1.25	300	-30~+70	38*38*11
QDC2525X	0.35~4	770	0.65	15	1.45	250	-30~+70	25.4*25.4*10
QDC2020X	0.6~4	900	0.5	18	1.35	100	-30~+70	20*20*8.6
QDC1919X	0.8~4.3	900	0.5	18	1.35	100	-30~+70	19*19*8.6
QDC6466K	0.95~2	1050	0.7	16	1.4	100	-10~+60	64*66*26
QDC1313T	1.71~5.9	800	0.45	18	1.3	100	-30~+70	12.7*12.7*7.2
QDC5050A	1.5~3	1500	0.7	17	1.4	100	0~+60	50.8*49.5*19
QDC4040A	1.7~3	1200	0.7	16	1.35	200	0~+60	40*40*20
QDC1313M	1.71~5.9	800	0.45	18	1.3	100	-30~+70	12.7*12.7*7.2
QDC2528C	2.7~6	3500	0.8	16	1.4	200	-30~+70	25.4*28*14
QDC3234A	2~4	2000	0.6	16	1.35	100	0~+60	32*34*21
QDC1822D	4~5	1000	0.4	18	1.35	60	-30~+70	18*22*10.4
QDC2123B	4~8	4000	0.6	18	1.35	60	0~+60	21*22.5*15
QDC1220D	5~6.5	800	0.5	18	1.3	60	-30~+70	12*20*9.5
QDC1623D	5~6.5	800	0.5	18	1.3	50	-30~+70	16*23*9.7
QDC1319C	6~12	4000	0.5	18	1.3	50	0~+60	13*19*12.7
QDC0915D	7~18	6000	0.6	17	1.35	30	-30~+70	8.9*15*7.8

\*Size: Exclude connectors.

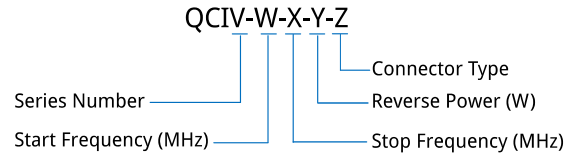
## Description

Isolator makes the RF signal transmit in one direction.



**Features:** Broadband, High Power, Low insertion Loss;

**Applications:** Power Amplifier, Radar, Laboratory Test.

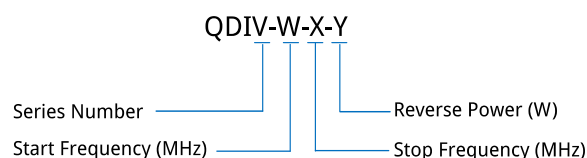
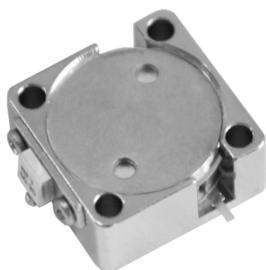


**Examples:** QCI6466H series Isolator, 30~40MHz, 20W, SMA female, specify QCI6466H-30-40-20-S.

Part Number	Freq. (GHz)	Bandwidth (MHz, max.)	Insertion (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Fwd. Power (W, max.)	Rev. Power (W)	Connector	Temperature (°C)	Size (mm)
QCI6466H	0.02~0.4	175	2	18	1.3	100	20~100	SMA, N	0~+60	64*66*22
QCI6060H	0.02~0.4	175	2	18	1.3	100	10~100	SMA, N	-20~+70	60*60*25.5
QCI12060H	0.07~0.23	56	2	40	1.3	150	10~100	SMA, N	-30~+70	120*60*25.5
QCI23085H	0.07~0.23	60	1.8	60	1.25	150	100	SMA, N	-30~+75	230*85*30
QCI5258E	0.16~0.33	70	0.7	18	1.3	500	10~100	SMA, N	-30~+70	52*57.5*22
QCI10458E	0.18~0.86	60	1	38	1.3	300	10~100	SMA, N	-30~+70	104*57.5*22
QCI12762H	0.3~0.5	40	0.8	45	1.25	300	10~100	SMA, N	-30~+70	127*62*22
QCI4550E	0.3~1.1	300	0.6	18	1.3	400	10~100	SMA, N	-30~+70	45*50*25
QCI4550X	0.3~1.1	300	0.6	18	1.3	400	10~100	SMA, N	-30~+70	45*49*18
QCI3538X	0.3~1.85	500	0.7	18	1.35	300	10~100	SMA, N	-30~+70	35*38*15
QCI9648H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*48*24
QCI9650H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*50*26.5
QCI9662H	0.35~0.47	70	0.7	40	1.25	150	100	SMA, N	-30~+70	96*62*26
QCI16080H	0.38~0.47	70	1.2	60	1.25	300	100	SMA, N	-10~+60	160*80*30
QCI7448H	0.45~2.7	400	0.8	38	1.25	250	10~100	SMA, N	-30~+70	73.8*48.4*22.5
QCI3033X	0.7~3	600	0.6	15	1.45	200	10~100	SMA, N	-30~+70	30*33*15
QCI3232X	0.7~3	600	0.6	15	1.45	200	10~100	SMA, N	-30~+70	32*32*15
QCI3434E	0.7~3	600	0.6	15	1.45	200	10~100	SMA, N	-30~+70	34*34*22
QCI2528B	0.9~4	400	0.4	20	1.25	200	10~100	SMA, N	-30~+70	25.4*28.5*15
QCI6466K	0.95~2	1050	0.65	16	1.4	100	10~100	SMA, N	-30~+70	64*66*26
QCI2025X	1.3~4	400	0.4	20	1.25	100	20	SMA	-30~+70	20*25.4*13
QCI5050A	1.5~3	1500	0.7	17	1.4	100	10~100	SMA, N	-10~+60	50.8*49.5*19
QCI2528C	2.7~6.2	3500	0.8	16	1.4	60	20	SMA, N	-10~+60	25.4*28*14
QCI3234A	2~4	2000	0.6	18	1.3	100	20	SMA, N	0~+60	32*34*21
QCI6237A	2~8	6000	1.5	13	1.8	20	5	SMA	0~+60	62*36.8*19.6
QCI1523C	3.6~7.2	1400	0.5	18	1.3	60	10	SMA	-10~+60	15*22.5*13.8
QCI1626B	3.7~5	1000	0.4	20	1.25	60	10	SMA	-10~+60	16*26.5*14.8
QCI2123B	4~8	4000	0.6	18	1.35	60	20	SMA	0~+60	21*22.5*15
QCI1622B	6~18	12000	1.5	11	1.9	30	10	SMA	0~+60	16*21.5*14
QCI1319C	7~15	4000	0.5	18	1.3	20	10	SMA	-10~+60	13*19*12.7
QCI2619C	8~12	4000	0.8	35	1.3	30	10	SMA	-10~+60	26*19*12.7
QCI1220C	9~16.5	2200	0.5	19	1.3	30	5	SMA	-30~+70	12*20*13
QCI1220A	18~26.5	8500	0.7	16	1.4	10	5	2.92mm	-30~+70	12*20*13
QCI1215A	26.5~40	13500	1.3	12	1.7	5	1	2.92mm	-30~+70	12*15*12

\*Size: Exclude connectors.

\*Note: The connector is SMA, and the maximum forward power can only reach 100W.



**Examples:** QDI6060H series Isolator, 60-88MHz, 20W, specify QDI6060H-60-88-20.

Part Number	Freq. (GHz)	Bandwidth (MHz, max.)	Insertion Loss (dB, max.)	Isolation (dB, min.)	VSWR (max.)	Fwd. Power (W, max.)	Rev. Power (W)	Temperature (°C)	Size (mm)
QDI6060H	0.02-0.4	175	2	18	1.3	100	10-100	-20-+70	60*60*25.5
QDI6466H	0.02-0.4	175	2	18	1.3	100	10-100	-10-+60	64*66*22
QDI7070X	0.13-2	30	0.6	10	1.3	500	10-100	-20-+70	70*70*15
QDI5050X	0.16-0.33	70	0.7	18	1.3	500	10-100	-30-+70	50.8*50.8*14.8
QDI4545X	0.3-1.1	300	0.6	19	1.3	500	10-100	-30-+70	45*45*13
QDI3538X	0.3-1.85	500	0.7	18	1.35	300	10-100	-30-+70	35*38*11
QDI3546X	0.3-1.85	500	0.7	18	1.35	300	100	-30-+70	35*46*11
QDI2525X	0.35-4	770	0.65	15	1.45	250	10-100	-30-+70	25.4*25.4*10
QDI2532X	0.35-4	770	0.65	15	1.45	250	100	-30-+70	25.4*31.7*10
QDI5032X	0.45-2.7	400	0.8	38	1.25	250	10-100	-30-+70	50.8*31.7*10
QDI4020X	0.6-2.7	400	0.8	40	1.2	100	10-100	-30-+70	40*20*8.6
QDI4027X	0.6-2.7	400	0.8	40	1.2	100	10-100	-30-+70	40*27.5*8.6
QDI2027X	0.6-3.6	900	0.5	18	1.35	150	100	-30-+70	20*27.5*8.6
QDI2020X	0.6-4	900	0.5	18	1.35	150	20	-30-+70	20*20*8.6
QDI1919X	0.8-4.3	900	0.5	18	1.35	100	20	-30-+70	19*19*8.6
QDI1925X	0.8-4.3	900	0.5	18	1.35	100	100	-30-+70	19*19*8.6
QDI6466K	0.95-2	1050	0.65	16	1.4	100	10-100	0-+60	64*66*26
QDI5050A	1.5-3	1500	0.7	17	1.4	100	10-100	-10-+60	50.8*49.5*19
QDI1313M	1.7-6	800	0.45	18	1.3	60	20	-30-+70	12.7*12.7*7.2
QDI1313T	1.7-6	800	0.45	18	1.3	60	20	-30-+70	12.7*12.7*7.2
QDI3234A	2-4	2000	0.6	18	1.3	100	10-100	-10-+60	32*34*21
QDI1626D	3.7-5	1000	0.5	18	1.3	100	10	-30-+70	16*26*10.5
QDI2528C	3-6	3500	0.8	16	1.4	60	20	-10-+60	25.4*28*14
QDI2123B	4-8	4000	0.6	18	1.35	60	20	0-+60	21*22.5*15
QDI1220D	5-7	800	0.5	18	1.3	80	10	-30-+70	12*20*9.5
QDI1623D	5-7	800	0.5	18	1.3	100	10	-30-+70	16*23*9.7
QDI0915D	7-18	6000	0.6	17	1.35	30	10	-30-+70	8.9*15*7.8
QDI1622B	6-18	12000	1.5	11	1.9	30	10	0-+60	16*21.5*14

\*Size: Exclude connectors.



**Description**

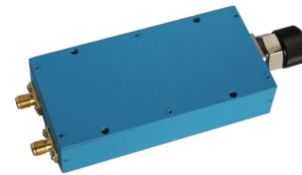
Phase Shifter can continuously change the delay of the signal in the RF transmission system, adjust the phase of measurement system on line. We could provide low IL, high power, manual phase shifter, which phase adjustment could reach to 900°/GHz, and power could reach to 100W.

**Features:** Broadband, High Sensitivity; **Applications:** Telecom, Radar, Instrument, Laboratory Test.

Part Number	Phase (°/GHz)	Freq. (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Avg. Power (W)	Connector	Size (mm)
QMPS5-40-KKF	5.4	DC~40	1.5	0.8	-	2.92mm (m) - 2.92mm (f)	Φ9*41.1~45.6
QMPS5-40-KKFF	5.4	DC~40	1.5	0.8	-	2.92mm (f) - 2.92mm (f)	Φ9*40~44.5
QMPS5-40-KK	5.4	DC~40	1.5	0.8	-	2.92mm (m) - 2.92mm (m)	Φ9*43.2~47.7
QMPS10-26.5-SSF	10.2	DC~26.5	1.3	0.8	-	SMA (m) - SMA (f)	Φ9*50.6~59.1
QMPS10-26.5-SFSF	10.2	DC~26.5	1.3	0.8	-	SMA (f) - SMA (f)	Φ9*49.5~58
QMPS10-26.5-SS	10.2	DC~26.5	1.3	0.8	-	SMA (m) - SMA (m)	Φ9*51.7~60.2
QMPS20-2-S	20	DC~2	1.25	0.35	50	SMA (m) - SMA (f)	70*13*15
QMPS20-3-S	20	DC~3	1.3	0.5	50	SMA (m) - SMA (f)	70*13*15
QMPS20-6-S	20	DC~6	1.4	0.75	50	SMA (m) - SMA (f)	70*13*15
QMPS20-9-S	20	DC~9	1.5	1	50	SMA (m) - SMA (f)	70*13*15
QMPS20-12-S	20	DC~12	1.6	1.25	50	SMA (m) - SMA (f)	70*13*15
QMPS20-18-S	20	DC~18	1.6	1.5	50	SMA (m) - SMA (f)	70*13*15
QMPS45-1-S	45	DC~1	1.2	0.3	50	SMA (f) - SMA (f)	131.5*48*21
QMPS45-2-S	45	DC~2	1.3	0.5	50	SMA (f) - SMA (f)	131.5*48*21
QMPS45-4-S	45	DC~4	1.4	0.75	50	SMA (f) - SMA (f)	131.5*48*21
QMPS45-6-S	45	DC~6	1.5	1	50	SMA (f) - SMA (f)	131.5*48*21
QMPS45-8-S	45	DC~8	1.5	1.25	50	SMA (f) - SMA (f)	131.5*48*21

## QMPSW-X-Y-Z

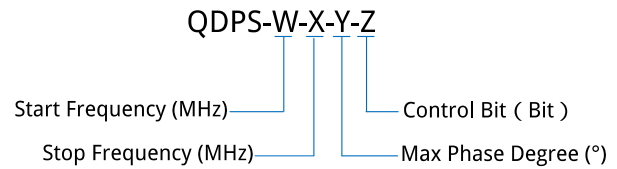
Phase Range (°/GHz) ————  
 Stop Frequency (GHz) ————  
 Display Type ————  
 Connector ————



Part Number	Phase Adjustment (°/GHz)	Freq. (GHz)	VSWR (max.)	Insertion Loss (dB, max.)	Avg. Power (W)	Connector(Y)	Display (Z)	Size (mm)
QMPS60-1-Y-Z	60	DC-1	1.2	0.3	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-2-Y-Z	60	DC-2	1.3	0.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-3-Y-Z	60	DC-3	1.4	0.8	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-4-Y-Z	60	DC-4	1.4	1	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-6-Y-Z	60	DC-6	1.5	1	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS60-8-Y-Z	60	DC-8	1.5	1.25	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 200*76*30.5 D: 205*76*50.5
QMPS90-1-Y-Z	90	DC-1	1.2	0.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-2-Y-Z	90	DC-2	1.3	0.8	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-3-Y-Z	90	DC-3	1.4	1.2	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-4-Y-Z	90	DC-4	1.4	1.2	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-6-Y-Z	90	DC-6	1.5	1.4	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS90-8-Y-Z	90	DC-8	1.5	1.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 236*76*30.5 D: 241*76*50.5
QMPS180-1-Y-Z	180	DC-1	1.4	1	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-2-Y-Z	180	DC-2	1.5	1.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-3-Y-Z	180	DC-3	1.5	1.75	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS180-4-Y-Z	180	DC-4	1.5	2	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 372*76*30.5 D: 377*76*50.5
QMPS360-1-Y-Z	360	DC-1	1.4	1.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 390*134*30.5 D: 395*134*50.5
QMPS360-2-Y-Z	360	DC-2	1.5	2	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog D: Digital	A: 390*134*30.5 D: 395*134*50.5
QMPS900-1-Y-A	900	DC-1	1.5	2.5	100	S: SMA (f) - SMA (f) N: N (f) - N (f)	A: Analog	692*148*67.5

## Description

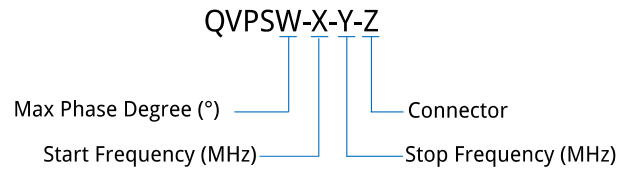
Digital controlled phase shifter has excellent flatness and high phase shifting accuracy, which is widely used in test system and phased array radar.



Part Number	Freq. ( GHz )	Phase Range ( ° )	Step ( dB )	Phase Control ( Bit )	Flatness (dB, typ.)	IL (dB, typ.)	VSWR (typ.)	Input Power (dBm, max.)	Connec tors
QDPS-3000-6000-360-6	3~6	0~360	5.625	6	4	8	2	32	SMA
QDPS-8000-12000-360-4	8~12	0~360	22.5	4	4	6.5	2	277	SMA

## Description

Voltage controlled phase shifter 0 ~ 360 ° It has the characteristics of low insertion loss and high phase accuracy, and is widely used in test equipment and communication system.

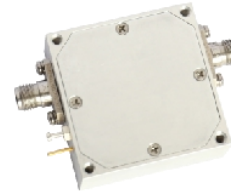


Part Number	Freq. (GHz)	Phase Range (°)	Flatness (±dB, typ.)	Control Voltage (V)	IL (dB, typ.)	VSWR (typ.)	Input Power (dBm, max.)	Connectors
QVPS360-800-1500-S	0.8~1.5	0~360	4	0~15	4.5	2	20	SMA
QVPS360-2000-4000-S	2~4	0~360	30	0~14	8	2	25	SMA

## Description

Power amplifier, used in the last stage of transmitter, is used to amplify the high-frequency modulated signal to meet the requirements of transmitting power, and then radiates it to space through the antenna to ensure that the receiver in a certain area can receive satisfactory signal level and does not interfere with the communication of adjacent channels.

**Features:** Broadband, High Power; **Applications:** Wireless, Transmitter, Radar, Laboratory Test.



## Power Amplifiers- Module

Part Number	Freq. (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QPA-0.1-3000-25-26	0.0001~3	-	26	25	4	28	2	118*73*35
QPA-0.2-300-34-34	0.0002~0.3	-	34	34	2.5	24	3	90*50*23
QPA-1.5-30-15-27	0.0015~0.03	-	27	15	1	12	2	50*36.61*10
QPA-5-500-46-37S	0.005~0.5	37	-	46	2	24~28	2	116*49*25
QPA-20-800-36-20S	0.02~0.8	20	-	36	1	5	2	58.5*35.88*12.1
QPA-20-6000-40-36	0.02~6	38	36	40	4	15	2.5	135*100*25
QPA-30-430-40-20S	0.03~0.43	20	-	40	2	5	2	58.54*35.88*12.1
QPA-30-500-32-37S	0.03~0.5	37	-	32	1.5	12	2	80*50*20
QPA-30-1000-45-30S	0.03~1	30	-	45	2.5	28	2	61*45*15
QPA-100-4000-33-33	0.1~4	-	33	33	2.5	12	2	80*60*20
QPA-100-4000-60-20	0.1~4	-	20	60	3	5	2	80*60*20
QPA-300-600-20-20	0.3~0.6	-	20	20	1	5	1.5	31.17*22.6*12
QPA-400-6000-30-25	0.4~6	-	25	30	2	12	2	30*25*10
QPA-400-8000-40-22	0.4~8	-	22	40	1.5	12	1.8	50*30*15
QPA-410-950-45-47S	0.41~0.95	47	-	45	2	28	2	200*89*25
QPA-500-2500-46-43	0.5~2.5	-	43	46	2.5	32	2	160*100*25
QPA-500-6000-30-37	0.5~6	-	37	30	3.5	50	2	80*60*20
QPA-690-6000-35-36	0.69~6	-	36	35	2	12	2	120*120*20
QPA-750-6000-35-35	0.75~6	39	35	35	3.5	50	2	61*45*15
QPA-800-6000-31-30	0.8~6	-	31	31	2	13	2	80*90*20
QPA-950-2150-25-25	0.95~2.15	-	25	25	1.5	5	2	48.5*29*10
QPA-960-1300-30-40S	0.96~1.3	40	-	30	1	36	1.9	79.69*73.8*18.11
QPA-1000-2000-20-20S	1~2	20	-	20	1	5	1.5	50*30*15
QPA-1000-4000-40-40S	1~4	40	-	40	2	50/28	2	61*45*15
QPA-1000-18000-35-30	1~18	-	30	35	2	12	2	61*45*15
QPA-1000-26500-28-24	1~26.5	-	24	28	1.5	12	2	50*30*15
QPA-1800-2200-46-45S	1.8~2.2	45	-	46	1	30	1.5	120*120*20
QPA-2000-3000-33-33	2~3	-	33	33	3	30~32	2	120*75*18
QPA-2000-6000-35-33S	2~6	33	-	35	4	28	2	70*50*20
QPA-2000-6000-40-39	2~6	-	39	40	2.5	28	2	80*60*20
QPA-2000-18000-40-40S	2~18	40	-	40	3	32	2	120*80*15
QPA-2000-18000-50-41S	2~18	41	-	50	3	+28/-5	2	120*60*25

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QPA-2300-4200-53-47.8S	2.3~4.2	47.8	-	53	2.5	50	2	200*89*25
QPA-2500-2700-50-47.8S	2.5~2.7	47.8	-	50	1	32	2	200*89*25
QPA-2700-2900-42-50S	2.7~2.9	50	-	42	1	32	1.8	135*69
QPA-3000-3500-23-46S	3~3.5	46	-	23	2	32	2	100*60*25
QPA-4000-5000-42-41.7S	4~5	41.7	-	42	2	24	2	165*50*20
QPA-6000-18000-25-26S	6~18	26	-	25	1	12	2	61*45*15
QPA-6000-18000-33-26S	6~18	26	-	33	1	12	2	61*45*15
QPA-6000-18000-35-33S	6~18	33	-	35	2	12	2	60*60*15
QPA-6000-18000-45-47S	6~18	47	-	45	-	28	2	240*200*40
QPA-8000-12000-45-46S	8~12	46	-	45	2	28	2	100*80*20
QPA-8000-18000-30-30S	8~18	30	-	30	3	8	2	61*45*15
QPA-8500-10500-25-43S	8.5~10.5	43	-	25	0.5	28	2	100*80*20
QPA-15000-16500-50-48S	15~16.5	48	-	50	1	28	2	100*80*18
QPA-15000-18000-30-33	15~18	-	33	30	0.5	8	2	61*45*15
QPA-18000-22000-35-13	18~22	-	13	35	1	5	2	50*30*15
QPA-18000-22000-40-33	18~22	-	33	40	1	7.5	2	61*45*15
QPA-18000-26000-30-30S	18~26	30	-	30	3.5	8	2.5	61*45*15
QPA-18000-26500-15-23	18~26.5	-	23	15	1	9	1.8	50*30*15
QPA-18000-26500-30-30	18~26.5	-	30	30	-	8	2	61*45*15
QPA-18000-26500-40-40	18~26.5	-	40	40	2	8	2	150*120*20
QPA-18000-26500-45-40S	18~26.5	40	-	45	3	28/-5	2	165*140*61
QPA-18000-40000-20-20	18~40	-	20	20	-	6	2	50*30*15
QPA-18000-40000-30-20	18~40	-	20	30	2	12	1.8	30*20*12
QPA-18000-40000-30-23S	18~40	23	-	30	2.5	12	2.5	61*45*15
QPA-18000-40000-30-27	18~40	-	27	30	2.5	12	2	150*120*15
QPA-18000-40000-30-30	18~40	-	30	30	2.5	6	2	180*150*40
QPA-19000-21000-40-30	19~21	-	30	40	1	8	2	61*45*15
QPA-20000-32000-22-21	20~32	-	21	22	2.5	5	2	50*30*15
QPA-20000-32000-25-21	20~32	-	21	25	1	8	1.5	50*30*15
QPA-20000-40000-33-29S	20~40	29	-	33	2.5	5	2	61*45*15
QPA-24000-26000-30-30	24~26	-	30	30	-	8	2	50*30*15
QPA-24000-26000-30-32	24~26	-	32	30	-	8	2	80*60*20
QPA-25000-28000-18-25	25~28	-	25	18	-	6	2	50*30*15
QPA-26000-40000-30-30S	26~40	30	-	30	4	8	2.5	61*45*15
QPA-26500-40000-18-23	26.5~40	-	23	18	1.5	6	1.8	60*40*15
QPA-26500-40000-27-27	26.5~40	-	27	27	2	6.5	2	61*45*15
QPA-26500-40000-30-26S	26.5~40	26	-	30	2	6	2	50*30*15
QPA-27000-31000-30-23	27~31	-	23	30	1.5	12	2	50*30*15
QPA-27500-31200-25-25	27.5~31.2	-	25	25	1	12	2	50*30*15
QPA-29000-31000-35-30	29~31	-	30	35	1	6	2	61*45*15
QPA-29500-31500-20-30	29.5~31.5	-	30	20	1	12	2	60*60*15
QPA-34000-36000-50-40P	34~36	40	-	50	1	22	2	61*45*20

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	P <sub>sat</sub> (dBm)	P <sub>1dB</sub> (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QPA-35000-38000-25-30	35~38	-	29.5	25	1.5	6	2	61*45*15
QPA-36000-50000-20-30	36~50	-	30	20	1.5	5	2	120*100*28.6
QPA-37000-40000-45-34	37~40	-	34	45	-	6	2	80*60*20
QPA-37000-43000-10-15	37~43	-	15	10	1.5	6	2	50*30*15
QPA-37000-43000-30-40S	37~43	40	-	30	1.5	20	2	80*60*20
QPA-38000-42000-25-30	38~42	-	30	25	1.5	6	2	80*60*20
QPA-39000-40000-40-33	39~40	-	33	40	-	6	2	61*45*15
QPA-40000-50000-20-20	40~50	-	20	20	-	6	2	50*30*28.6
QPA-40000-50000-45-29S	40~50	29	-	45	2	5~6	2	150*120*30
QPA-40000-53000-40-18S	40~53	18	-	40	2	5	2	50*30*15
QPA-40000-60000-36-20S	40~60	20	18	36	-	5	2.6	50*30*30
QPA-40000-60000-40-20S	40~60	20	-	40	2.5	15	2	50*30*15
QPA-47000-52000-20-30S	47~52	30	-	20	1.5	15	2	61*45*15
QPA-47000-52000-25-30S	47~52	30	-	25	1.5	15	2	61*45*15
QPA-47000-52000-30-30S	47~52	30	-	30	2	15	2	61*45*28.6
QPA-50000-75000-35-20S	50~75	20	18	35	-	5	2.6	50*30*30
QPA-60000-67000-30-27	60~67	30	27	30	2	4.5	2	80*60*20
QPA-61000-65000-18-26S	61~65	26	23	18	1	5	2	100*80*19
QPA-61000-65000-20-20S	61~65	20	17	20	1.5	5	2	30*19*19

**Power Amplifiers- System**

Part Number	Freq. (GHz)	Psat (dBm)	P1dB (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QPAS-20-2700-50-44S	0.02~2.7	44	-	50	2.5	220	2.2	460*491*88
QPAS-500-2700-51-50	0.5~2.7	-	50	51	2.5	220	3	602.5*482.6*310.3
QPAS-600-6000-43-43S	0.6~6	43	-	43	4	220	2	526.7*483*147
QPAS-700-2000-40-40	0.7~2	-	40	40	1	220	2	308*220*70
QPAS-700-2500-50-52S	0.7~2.5	52	-	50	2	220	2	481.8*500*88.5
QPAS-700-2700-50-50S	0.7~2.7	50	-	50	2	220	2	544.5*426*128
QPAS-700-6000-30-30S	0.7~6	30	-	30	2	220	2.5	44.5*138*250
QPAS-700-6000-40-40S	0.7~6	40	-	40	2	220	2.5	44.5*483*280
QPAS-1000-26500-20-18	1~26.5	-	18	20	2.5	220	2.6	166*106.4*56.4
QPAS-2000-6000-40-46S	2~6	46	-	40	3	220	2	481.8*500*88.5
QPAS-2000-18000-40-38S	2~18	38	-	40	2.5	220	2	166*106.4*56.4
QPAS-2000-18000-40-40S	2~18	40	-	40	3	220	2	430*400*44.3
QPAS-3300-4900-55-55S	3.3~4.9	55	-	55	1.5	220	2	481.8*500*88.5
QPAS-5000-6000-55-63S	5~6	63	-	55	1	220	2	482.6*559*132.5
QPAS-6000-12000-30-30S	6~12	30	-	30	2	220	2.5	44.5*138*250
QPAS-6000-12000-40-40S	6~12	40	-	40	2	220	2.5	44.5*483*280
QPAS-6000-18000-45-45S	6~18	45	-	45	2.5	220	2	481.8*338*44.3
QPAS-6000-18000-65.3-50.5S	6~18	50.5	-	65.3	4	220	1.9	246*246*140
QPAS-6000-18000-68-54S	6~18	54	-	68	5.3	220	2	701.5*434*265
QPAS-8000-12000-40-47S	8~12	47	-	40	2	220	2	481.8*500*88.5
QPAS-8000-18000-40-45S	8~18	45	-	40	2	220	2	538*430*44.3
QPAS-26500-40000-18-23	26.5~40	23	-	18	1.5.	110	1.8	136*186*52
QPAS-47000-51000-55-43S	47~51	43	-	55	4	220	1.6	328.5*226*180.5

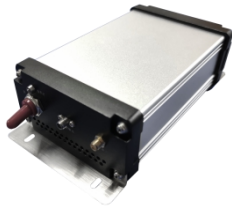
\*Size: Exclude connectors



**Description**

Low noise amplifier has a low noise figure. It is generally used as high or intermediate frequency pre-amplifier of various radio receivers, as well as amplifier circuit of high-sensitivity electronic detection equipment. In the case of amplifying small signal, the noise of amplifier itself may disturb the signal seriously, so we hope to reduce the noise and improve the ratio of signal-to-noise.

**Features:** Broadband, Low Noise; **Applications:** Wireless, Receiver, Radar, Laboratory Test.


**Low Noise Amplifiers- Module**

Part Number	Freq. (GHz)	Noise Figure (dB)	Output Power (P1dB) (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QLA-0.1-500-24-30	0.0001~0.5	3	5	24	0.5	15	1.5	50*30*15
QLA-0.1-500-30-30	0.0001~0.5	3	5	30	0.5	5	1.5	50*30*15
QLA-10-60-15-50	0.01~0.06	5	23	15	1.0	12	1.5	50*30*15
QLA-10-60-16-50	0.01~0.06	5	23	16	1.5	5	-	48.5*29
QLA-20-1000-50-20	0.02~1	2	18	50	-	5	2.5	100*40*16
QLA-25-1000-50-13	0.025~1	1.3	14	50	-	5~20	2.5	60*30*20
QLA-30-1000-50-13	0.03~1	1.3	15	50	2.5	12	1.5	50*30*15
QLA-30-6000-25-50	0.03~6	5	10	25	3	5	2	50*30*15
QLA-50-90-15-32	0.05~0.09	3.2	10	15	0.2	15	1.5	50*30*15
QLA-50-5000-20-20	0.05~2	2	13	20	1	5	2	36.5*21.5*12.1
QLA-50-6000-25-40	0.05~6	4	22	25	3	12	2	50*30*15
QLA-100-6000-25-25	0.1~6	2.5	15	25	2	12	1.5	50*30*15
QLA-100-12000-25-25	0.1~12	2.5	15	25	2	12	1.5	50*30*15
QLA-100-15000-45-22	0.1~15	2.2	5	45	2.5	12	1.5	50*30*15
QLA-100-26500-30-30	0.1~26.5	3	20	30	2.5	12	2	40*35*12
QLA-200-6000-42-13	0.2~6	1.3	15	42	2	12	2	50*30*15
QLA-400-8000-40-25	0.4~8	2.5	14	40	1.5	12	2	50*30*15
QLA-500-18000-40-30	0.5~18	3	10	40	1.5	12	2.5	40*35*12
QLA-500-18000-40-35	0.5~18	3.5	12	40	2	5	2	50*30*15
QLA-500-40000-45-60	0.5~40	6	16	45	4.5	12	2	50*30*15
QLA-700-1100-20-25	0.7~1.1	2.5	13	20	1	12	1.5	50*30*15
QLA-700-1100-25-25	0.7~1.1	2.5	13	25	1.5	5	-	48.5*29
QLA-800-18000-25-35	0.8~18	3.5	13	25	2.5	12	2	50*30*15
QLA-950-2150-20-20	0.95~2.15	2	15	20	1.5	5	2	48.5*29*10
QLA-1000-2000-30-20	1~2	-	15	30	1.5	5	2	60*29*10
QLA-1000-2000-30-30	1~2	3	10	30	2	5	2	52.73*36*12.11
QLA-1000-2000-35-07	1~2	0.7	20	35	2	5	2	52.73*36*12.11
QLA-1000-2000-35-10	1~2	1	18	35	1	5	1.8	52.73*36*12.11
QLA-1000-2500-34-07	1~2.5	0.7	18	34	1	5	1.7	52.73*36*12.11

\*Size: Exclude connectors.

Part Number	Freq. (GHz)	Noise Figure (dB)	Output Power (P1dB) (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QLA-1000-12000-45-30	1~12	3	10	45	2	5 / 12	1.5	50*30*15
QLA-1000-18000-30-40	1~18	4	10	30	1.5	12	1.5	50*30*15
QLA-1000-18000-40-32	1~18	3.2	8	40	2	5	1.8	50*30*15
QLA-1000-18000-42-25	1~18	2.5	10	42	1.5	9	2	21.8*17.8*7.4
QLA-1000-18000-45-30	1~18	3	10	45	2	5, 12	1.5	50*30*15
QLA-1000-18000-47-25	1~18	2.5	10	47	1.5	9	2	21.8*17.8*7.4
QLA-1000-18000-47-32	1~18	3.2	12	47	-	12	1.8	50*30*15
QLA-1000-18000-50-30	1~18	3	20	50	2.5	12	2	50*30*15
QLA-1000-18000-55-22	1~18	2.2	10	55	1.5	12	2.5	40*35*12
QLA-1000-20000-40-40	1~20	4	16	40	2	12	1.5	50*30*15
QLA-1000-40000-40-50	1~40	5	16 (Psat)	40	4.5	12	3	61*45*15
QLA-2000-8000-20-40	2~8	4	8	20	1.5	5	1.6	50*30*15
QLA-2000-18000-18-30	2~18	3	10	18	1.5	12	1.5	50*30*15
QLA-2000-18000-28-30	2~18	3	10	28	1.5	12	1.5	50*30*15
QLA-2000-26500-25-40	2~26.5	4	8	25	2	12	1.8	50*30*15
QLA-2000-26500-48-50	2~26.5	5	10	48	5	9	2.5	50*30*15
QLA-2000-50000-36-80	2~50	8	10	36	2	5	2	45*34*9.5
QLA-2700-3100-40-09	2.7~3.1	0.9	20	40	1	5	2	68*31.26*12.11
QLA-3000-12000-24-30	3~12	3	21	24	1.5	12	1.5	50*30*15
QLA-3000-15000-15-30	3~15	3	8	15	1	5	1.5	50*30*15
QLA-5000-11000-40-30	5~11	3	13	40	2	5	2	33*28*12.11
QLA-5400-5900-35-08	5.4~5.9	0.8	10	35	0.3	5	1.4	50*30*15
QLA-6000-18000-20-25	6~18	2.5	10	20	1.5	5	2	25*20*15
QLA-6000-18000-25-50	6~18	5	10	25	3	5	2	50*30*15
QLA-6000-18000-50-30	6~18	3	15	50	1.5	12	2	50*30*15
QLA-8000-12000-15-40	8~12	4	13	15	0.5	5	1.5	50*30*15
QLA-8000-18000-20-40	8~18	4	8	20	1.5	5	1.6	50*30*15
QLA-8000-26500-15-35	8~26.5	3.5	8	15	1.5	5	1.5	50*30*15
QLA-8000-26500-40-65	8~26.5	6.5	18	40	2	12	2	50*30*15
QLA-12000-18000-20-40	12~18	4	15	20	1.5	12	1.5	50*30*15
QLA-12000-40000-30-40	12~40	4	5	30	2.5	12	2.5	50*30*15
QLA-16000-22000-35-25	16~22	2.5	19	35	1.5	12	2	50*30*15
QLA-16000-40000-20-35	16~40	3.5	16	20	2	5	2	50*30*15
QLA-17500-20200-20-20	17.5~20.2	2	2	20	0.5	5	1.5	50*30*15
QLA-17700-21200-30-80	17.7~21.2	8	10	30	2	15~24	2	50*30*15
QLA-18000-26500-30-40	18~26.5	4	20	30	2	12	2	50*30*15
QLA-18000-26500-45-32	18~26.5	3.2	10	45	2	5	1.8	50*30*15
QLA-18000-28000-20-40	18~28	4	8	20	1.5	5	1.6	50*30*15
QLA-18000-40000-25-50	18~40	5	10	25	3	5	2	50*30*15
QLA-18000-40000-25-50(P15)	18~40	5	15	25	2.5	12	2	50*30*15
QLA-18000-40000-30-35	18~40	3.5	8	30	2.5	12	2.2	17.8*16.2*7.4
QLA-18000-40000-30-50(P20)	18~40	5	20	30	2.5	12	2.5	50*30*15

\*Size: Exclude connectors

Part Number	Freq. (GHz)	Noise Figure (dB)	Output Power (P1dB) (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QLA-18000-40000-40-45	18~40	4.5	6	40	2.5	15	2	50*30*15
QLA-18000-40000-50-45	18~40	4.5	5	50	3	15	2	50*30*15
QLA-20000-32000-40-25	20~32	2.5	10	40	2.5	5	2	50*30*15
QLA-23000-25000-35-20	23~25	2	-3	35	1.5	5	1.8	50*30*15
QLA-23000-40000-34-35	23~40	3.5	10	34	2.5	12	2	50*30*15
QLA-25300-27200-50-18	25.3~27.2	1.8dB@23°C	5	49~51	1	12	1.7	58*40*22.1
QLA-26500-40000-20-30	26.5~40	3	5	20	1.5	5	1.5	50*30*15
QLA-39000-41000-30-32	39~41	3.2	10	30	0.5	5	2	50*30*15
QLA-40000-53000-40-50	40~53	5	10	40	2	5	2	50*30*15
QLA-50000-59000-40-55	50~59	5.5	10	40	1	8	2	50.2*40*25
QLA-50000-75000-15-40	50~75	4	5	15	-	5	2.4	41.52*25*20
QLA-50000-75000-35-60	50~75	6	5	35	-	5	2.4	50*25*20
QLA-57000-67000-30-50	57~67	5	10	30	-	12	2	50*30*15
QLA-75000-110000-35-40	75~110	4	1	35	-	5	3.5	51.52*25*19

\*Size: Exclude connectors

\*Note: LNA system with AC 220V power supply is available

## Low Noise Amplifiers - System

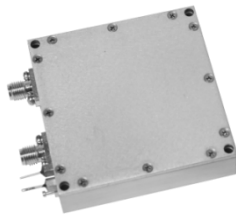
Part Number	Freq. (GHz)	Noise Figure (dB)	Output Power (dBm)	Gain (dB)	Gain Flatness (±dB)	Voltage (V AC)	VSWR	Size (mm)
QLAS-0.01-15000-12-70	0.00001~15	7	12	12	3	220	2	136*186*52
QLAS-9K-1000-32-30	0.000009~1	3	10	32	2.5	220	2.5	200*200*35
QLAS-25-1000-50-13	0.025~1	1.3	14	50	-	80~270	2.5	136*186*52
QLAS-100-18000-35-40	0.1~18	4	10	35	3	220	2.5	166*106.4*56.4
QLAS-100-26500-30-55	0.1~26.5	5.5	20	30	3	220	2	136*186*52
QLAS-400-8000-40-25	0.4~8	2.5	14	40	1.5	110	2	166*106.4*56.4
QLAS-500-8000-20-25	0.5~8	2.5	20	20	2	220	2	166*106.4*56.4
QLAS-500-18000-45-30	0.5~18	3	10	45	1.5	220	2.5	186*136*52
QLAS-700-8000-30-25	0.7~8	2.5	13	30	2	220	2	161*135*50
QLAS-1000-5000-25-40	1~5	4	20 (Psat)	25	-	110	1.8	166*106.4*56.4
QLAS-1000-6000-55-25	1~6	2.5	10	55	1.5	220	2	166*106.4*56.4
QLAS-1000-18000-40-30	1~18	3	15	40	2	220	2	166*106.4*56.4
QLAS-1000-18000-45-30	1~18	3	10	45	2	220	1.5	166*106.4*56.4
QLAS-1000-18000-55-22	1~18	2.2	10	55	1.5	220	2.5	166*106.4*56.4
QLAS-6000-18000-50-30	6~18	3	15	50	1.5	220	2	166*106.4*56.4
QLAS-6000-40000-45-35	6~40	3.5	10	45	2.5	220	2	120*90*46.2
QLAS-6000-40000-55-35	6~40	3.5	10	55	3.5	220	2	166*106.4*56.4
QLAS-18000-40000-40-35	18~40	3.5	8	40	2.5	220	2.5	120*90*46.2
QLAS-18000-40000-45-40	18~40	4.0	10	45	3.5	220	2	166*106.4*56.4
QLAS-18000-40000-50-35	18~40	3.5	10	50	4	220	2	166*106.4*56.4
QLAS-18000-40000-55-35	18~40	3.5	10	55	3	110~220	2	166*106.4*56.4
QLAS-26000-30000-25-50	26~30	5	20 (Psat)	25	-	110	1.8	166*106.4*56.4
QLAS-40000-60000-35-70	40~60	7.0	20	35	2.5	220	2	196*180*40

\*Size: Exclude connectors & rack mount brackets & handles.

**Description**

PLDRO, the abbreviation of Phase Locked Dielectric Resonator Oscillators, is a high stable and reliable frequency source. Qualwave supplies very low phase noise PLDRO at frequencies up to 40GHz.

**Features:** High Frequency Stability, Ultra Low Phase Noise; **Applications:** Wireless, Transceiver, Radar, Laboratory Test.



Spurious: -70dBc max.                      Input Power: 3~10dBm  
 Harmonic: -20dBc max.                    Output Power: 13dBm min.  
 Voltage: +12V DC  
 Lock Indicator: TTL Logic; High (Locked); Low: (Unlocked)

**Internal Reference**

Part Number	Output (GHz)	Phase Noise@1KHz Offset (dBc/Hz)					Reference (MHz)	Reference Phase (dBc/Hz@1kHz)	Current (mA max.)	Size (mm)
		@100Hz	@1KHz	@10KHz	@100KHz	@1MHz				
QPDO-I-100-34.941	34.941	-65	-75	-80	-85	-85	100	-	800(+12V)	65*80*28
QPDO-I-100-38	38	-	-100	-	-	-	100	-	700	70*57.2*17.5
QPDO-I-100-24	24	-65	-75	-80	-80	-115	100	-	950	65*80*18
QPDO-I-100-18.3325	18.3325	-	-	-	-110	-130	100	-155	650	57.2*57.2*35.7
QPDO-I-100-18.0925	18.0925	-	-	-	-110	-130	100	-155	650	57.2*57.2*35.7
QPDO-I-107-14	14	-85	-107	-117	-117	-140	-	-	500	50.8*47.8*35.7
QPDO-I-114-12	12	-86	-114	-117	-117	-130	100	-160	600	57.2*57.2*35.3
QPDO-I-105-11	11	-83	-105	-113	-115	-135	100	-	600	57.2*57.2*35.7
QPDO-I-10-9.6-10M	9.6	-81	-94	-108	-	-	10	-126	560	57.2*57.2*33.8
QPDO-I-20-9.6	9.6	-	-	-80	-	-	20	-	230	57.2*57.2*16
QPDO-I-100-7.6275	7.6275	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.5375	7.5375	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.5	7.5	-85	-115	-120	-	-	100	-	560	57.2*57.2*33.8
QPDO-I-100-7.4475	7.4475	-	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-7.3575	7.3575	-125	-	-	-115	-133	100	-155	650	57.2*57.2*35.7
QPDO-I-100-4.8	4.8	-94	-116	-122	-122	-140	100	-	600	50.8*47.8*35.7
QPDO-I-100-4.1	4.1	-95	-118	-122	-122	-140	100	-	600	50.8*47.8*35.7
QPDO-I-80-7.68	7.68	-	-	-120	-120	-	80	-	560	57.2*57.2*35
QPDO-I-50-1.37	1.37	-100	-125	-128	-129	-140	50	-	600	57.2*57.2*35.3

\*Size: Exclude connectors.

**External Reference**

Part Number	Output (GHz)	Phase Noise@1KHz Offset (dBc/Hz)					Reference (MHz)	Reference Phase (dBc/Hz@1kHz)	Current (mA max.)	Size (mm)
		@100Hz	@1KHz	@10KHz	@100KHz	@1MHz				
QPDO-E2-100-30	30	-75	-93	-96	-101	-129	100	-157	350	57.2*57.2*15.7
QPDO-E-100-20	20	-80	-103	-112	-112	-133	100	-155	350	57.2*57.2*15.7
QPDO-E-100-17.65	17.65	-80	-104	-110	-110	-132	100	-155	350	57.2*57.2*15.7
QPDO-E-50-17.65	17.65	-80	-104	-110	-110	-132	50	-155	450	57.2*57.2*15.7
QPDO-E-100-14	14	-85	-107	-117	-117	-140	100	-157	300	50.8*47.8*15.7
QPDO-E-100-11	11	-83	-105	-113	-113	-135	100	-157	350	57.2*57.2*15.7
QPDO-E-100-10	10	-88	-113	-120	-120	-140	100	-157	300	50.8*47.8*15.7
QPDO-E-100-10.1	10.1	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-10-9.99	9.99	-85	-110	-115	-115	-134	10	-	600	57.2*57.2*33.8
QPDO-E-9953.28	9.95328	-	-	-81	-87	-92	155.52	-130@10&100KHz	160	50.8*50.8*14.3
QPDO-E-100-9.9	9.9	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-9.2	9.2	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-9.1	9.1	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-9	9	-88	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-8.82	8.82	-85	-108	-115	-115	-135	100	-155	350	57.2*57.2*15.7
QPDO-E-100-8.3	8.3	-90	-113	-118	-120	-140	100	-155	350	57.2*57.2*15.7
QPDO-E-100-8	8	-90	-113	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-100-7	7	-92	-115	-120	-120	-140	100	-155	350	50.8*47.8*15.7
QPDO-E-100-4.5	4.5	-92	-116	-120	-120	-140	100	-155	300	50.8*47.8*15.7
QPDO-E-10-8	8	-90	-113	-120	-120	-140	10	-	600	50.8*47.8*35.7
QPDO-E-10-6.95	6.95	-90	-110	-115	-115	-135	10	-170@10KHz	600	60.2*57.2*33.8
QPDO-E-10-6.3	6.3	-90	-118	-120	-120	-135	10	-170@10KHz	600	60.2*57.2*33.8
QPDO-E-10-4.5	4.5	-92	-116	-120	-120	-140	10	-	600	50.8*47.8*35.7
QPDO-E-10-1	1	-	-	-90	-	-	10	-	280	40*50*10
QPDO-E-10-0.175	0.175	-	-	-90	-	-	10	-	280	40*50*10

**Bias Tee**

Part Number	Frequency (GHz)	IL (dB. Max.)	Average Power (W)	Voltage (V)	VSWR (Max.)	Connector
QBT-5-700-S	0.005~0.7	0.5	150	0~48	1.8	40*20*13
QBT-10-2500	0.01~2.5	0.6	150	0~60	1.8	SMA
QBT-10-4200-S	0.01~4.2	1.25	5	72	1.25	SMA
QBT-10-4200-N	0.01~4.2	1.25	5	72	1.25	N
QBT-200-12000-S	0.2~12	0.6	10	/	1.8	SMA
QBT-5000-20000	5~20	0.7	2	10	2	SMA
QBT-9000-11000-S	9~11	0.5	50	28	2	SMA
QBT-18000-40000	18~40	2	3	10	2	2.92mm
QBT-24900-25100	24.9~25.1	0.8	3	5~48	2	2.92mm

**Rotary Joints**

Part Number	Channels	Frequency (GHz)	Outside Diameter (mm)	Electrical Channels	Conenector
QRJ1-3000-07	1	DC~3	7	0	RG405 (SMA, MCX, MMCX)
QRJ1-3000-22	1	DC~3	22	1 ~ 12	RG405 (SMA, MCX, MMCX)
QRJ1-3000-32	1	DC~3	32.8	13 ~ 24	RG405 (SMA, MCX, MMCX)
QRJ1-18000-12	1	DC~18	12.7	0	SMA Female
QRJ1-18000-32	1	DC~18	32.8	1~24	SMA Female
QRJ1-18000-56	1	DC~18	56	1~48	SMA Female
QRJ1-18000-86	1	DC~18	86	1~96	SMA Female
QRJ1-50000-12	1	DC~50	12.7	0	2.4mm Female
QRJ1-50000-56	1	DC~50	56	1~48	2.4mm Female
QRJ2-18000-31	2	1 Channel:DC~18 2 Channel:DC~5GHz	31.7	0	SMA Female

**Wrench**

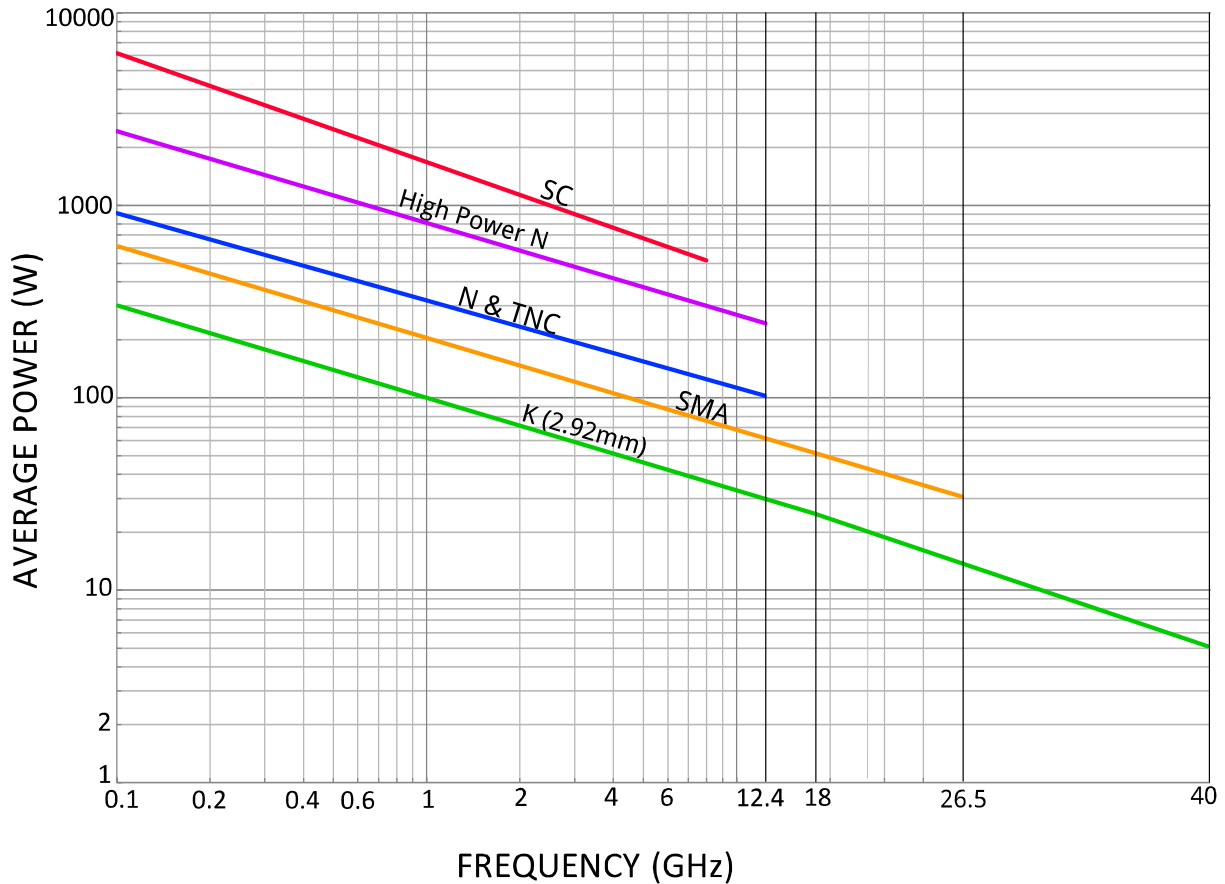
Part Number	Connector	diameter (mm)
QW-T1	TNC	14.2
QW-N	N	19.2mm (N1), 21.2mm (N2)
QW-N3	N	20.2mm
QW-S1	SMA	8mm
QW-K1	2.92mm	8.1mm

**Balance Mixer**

Part Number	RF (GHz)	LO (GHz)	IF (GHz)	Conversion Loss (dB)	Isolation (dB)	P1dB (dBm)	VSWR	Connector
QBM-10-2000	0.01~2	0.01~2	0.01~1	8	25	1	2	SMA

Power handling capability of a switch depends on the connector type, materials, and the mechanical design. Temperature and frequency are also important factors which affect the power capacity of a switch in operation.

The power chart below describes the Avg. Power versus frequency for different connector types. (Based on 20 degree C environmental temperature.) The power capability decreases as the frequency increases. Connectors like SC, N can handle more power compared to others while the frequency is limited to a smaller range.



VSWR	1.5	2	2.5	3	3.5	4	4.5	5
Derating	0.96	0.88	0.84	0.75	0.7	0.64	0.6	0.56



# Qualwave Inc.

Addr.: 5F, Bld.1, Tianke Plaza, No.999 Tiangong Ave.,  
Tianfu New Area, Chengdu, 610213, China

Tel: +86-28-61154929

Email: [sales@qualwave.com](mailto:sales@qualwave.com)

Web: [www.qualwave.com](http://www.qualwave.com)

