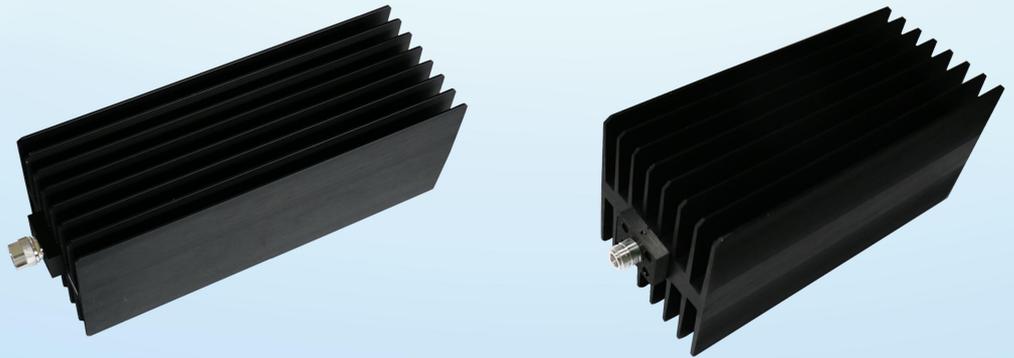


# Terminations



2019

## 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. Mean while we customize products according to special requirements.

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 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 decrease lead time. Our management and service are customer oriented, ensuring to response to customer as soon as possible.

## Products

<b>ATTENUATORS</b>	<b>CABLE ASSEMBLIES</b>	<b>COAXIAL ADAPTERS</b>	<b>CIRCULATORS</b>
<b>DC-BLOCKS</b>	<b>DETECTORS</b>	<b>FILTERS</b>	<b>FREQUENCY SOURCES</b>
<b>PHASE SHIFTERS</b>	<b>POWER DIVIDERS/COMBINERS</b>	<b>SWITCHES</b>	<b>TERMINATIONS</b>
<b>COUPLERS</b>	<b>ISOLATORS</b>		

Address: No. 366, North Lakeside Road, Tianfu New Area, Chengdu, 610015, China

Tel: +86-28-6115-4929

E-mail: sales@qualwave.com

# Table of Contents

QCT6701 (DC~67GHz, 1W).....	1
QCT5002 (DC~50GHz, 2W).....	2
QCT5005 (DC~50GHz, 5W).....	3
QCT4002 (DC~40GHz, 2W).....	4
QCT4005 (DC~40GHz, 5W).....	5
QCT4010 (DC~40GHz, 10W).....	6
QCT4020 (DC~40GHz, 20W).....	7
QCT4050 (DC~40GHz, 50W).....	8
QCT2602 (DC~26.5GHz, 2W).....	9
QCT2605 (DC~26.5GHz, 5W).....	10
QCT2610 (DC~26.5GHz, 10W).....	11
QCT2625 (DC~26.5GHz, 25W).....	12
QCT2650 (DC~26.5GHz, 50W).....	13
QCT26K1 (DC~26.5GHz, 100W).....	14
QCT1801 (DC~18GHz, 1W).....	15
QCT1802 (DC~18GHz, 2W).....	16
QCT1805 (DC~18GHz, 5W).....	17
QCT1810 (DC~18GHz, 10W).....	18
QCT1820 (DC~18GHz, 20W).....	19
QCT1825 (DC~18GHz, 25W).....	20
QCT1850 (DC~18GHz, 50W).....	21
QCT18K1 (DC~18GHz, 100W).....	22
QCT18K15 (DC~18GHz, 150W).....	23
QCT18K2 (DC~18GHz, 200W).....	24
QCT18K25 (DC~18GHz, 250W).....	25
QCT18K3 (DC~18GHz, 300W).....	26
QCT18K5 (DC~18GHz, 500W).....	27

# QCT6701

## DC~67GHz, 1W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~67GHz  
 Average Power<sup>†</sup>: 1W  
 VSWR: 1.3 max.  
 Impedance: 50Ω

[1] Derated linearly to 0.05W@120°C.

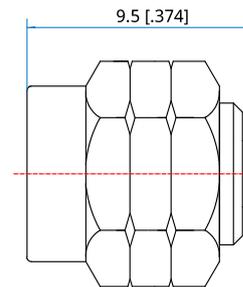
### Mechanical

Length: 9.5mm  
 0.374in  
 Connector: 1.85mm male  
 Outer Conductor: Passivated SUS303 stainless steel  
 Dielectric: PEI  
 Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+125°C

### Outline Drawings



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

### How To Order

#### QCT6701-X-Y

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:  
 V - 1.85mm male

Examples:  
 To order a termination, DC-67GHz, 1.85mm male, specify QCT6701-67-V.

Customization is available upon request.

# QCT5002

## DC~50GHz, 2W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~50GHz  
 Average Power<sup>\*1</sup>: 2W  
 Impedance: 50Ω  
 VSWR: 1.4 max.

[1] Derated linearly to 0.1W@120°C.

### Mechanical

Size<sup>\*2</sup>: Φ8\*24.2mm  
 Φ0.315\*0.953in  
 Size<sup>\*3</sup>: Φ8\*22.3mm  
 Φ0.315\*0.878in  
 Weight: 5g  
 Connectors: 2.4mm  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

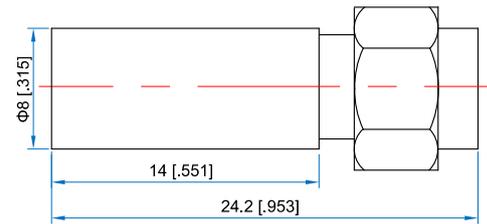
[2] 2.4mm male.

[3] 2.4mm female.

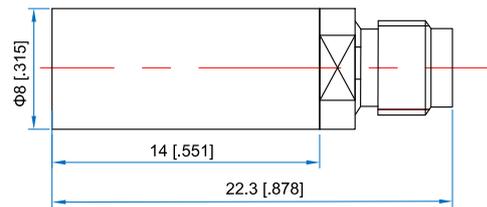
### Environmental

Temperature: -55~+85°C

### Outline Drawings



Outline A



Outline B

Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

### How To Order

**QCT5002-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

2 - 2.4mm male (Outline A)

2F - 2.4mm female (Outline B)

Examples:

To order a termination, DC-50GHz, 2.4mm male, specify QCT5002-50-2.

Customization is available upon request.

# QCT5005

## DC~50GHz, 5W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~50GHz  
 Average Power<sup>†</sup>: 5W  
 Impedance: 50Ω  
 VSWR: 1.4 max.

[1] Derated linearly to 0.25W@120°C.

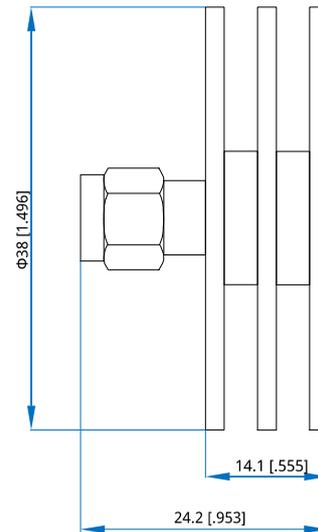
### Mechanical

Connector: 2.4mm  
 Weight: 30g  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



Unit: mm [in]

Tolerance: ±0.5mm [±0.02in]

### How To Order

**QCT5005-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

2 - 2.4mm male

2F - 2.4mm female

Examples:

To order a termination, DC-50GHz, 2.4mm male, specify QCT5005-50-2.

Customization is available upon request.

# QCT4002

## DC~40GHz, 2W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~40GHz  
 Average Power<sup>\*1</sup>: 2W  
 Impedance: 50Ω  
 VSWR: 1.35 max.

[1] Derated linearly to 0.1W@120°C.

### Mechanical

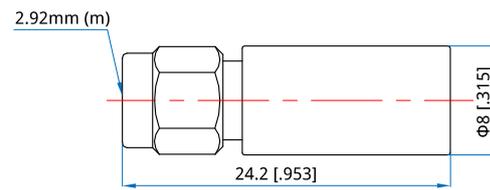
Size<sup>\*2</sup>: Φ8\*24.2mm  
 Φ0.315\*0.953in  
 Size<sup>\*3</sup>: Φ8\*22.2mm  
 Φ0.315\*0.874in  
 Weight: 5g  
 Connectors: 2.92mm  
 Housing: Aluminum  
 Outer Conductor: Gold Plated Brass or Stainless Steel  
 Male Inner Conductor: Gold Plated Brass  
 Female Inner Conductor: Gold Plated Beryllium Copper

[2] 2.92mm male.  
 [3] 2.92mm female.

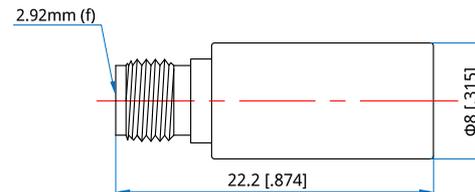
### Environmental

Temperature: -55~+125°C

### Outline Drawings



Outline A



Outline B

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

### How To Order

#### QCT4002-X-Y

X: Frequency in GHz

Y: Connector type

Connector naming rules:

K - 2.92mm male (Outline A)

KF - 2.92mm female (Outline B)

Examples:

To order a termination, DC-40GHz, 2.92mm male, specify QCT4002-40-K.

Customization is available upon request.

# QCT4005

## DC~40GHz, 5W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~40GHz  
 Average Power<sup>†</sup>: 5W@25°C max.  
 VSWR: 1.35 max.  
 Impedance: 50Ω

[1] Derated linearly to 0.25W@120°C.

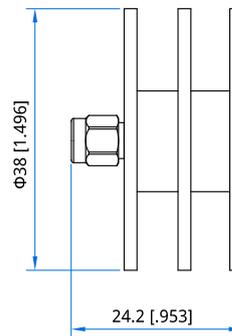
### Mechanical

Connector: 2.92mm  
 Weight: 30g  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

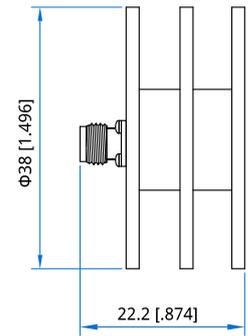
### Environmental

Temperature: -55~+85°C

### Outline Drawings



Outline A



Outline B

Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

### How To Order

**QCT4005-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

K - 2.92mm male (Outline A)

KF - 2.92mm female (Outline B)

Examples:

To order a termination, DC-40GHz, 2.92mm male, specify QCT4005-40-K.

Customization is available upon request.

# QCT4010

## DC~40GHz, 10W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~40GHz  
 Average Power<sup>\*1</sup>: 10W@25°C max.  
 VSWR: 1.35 max.  
 Impedance: 50Ω

[1] Derated linearly to 0.5W@120°C.

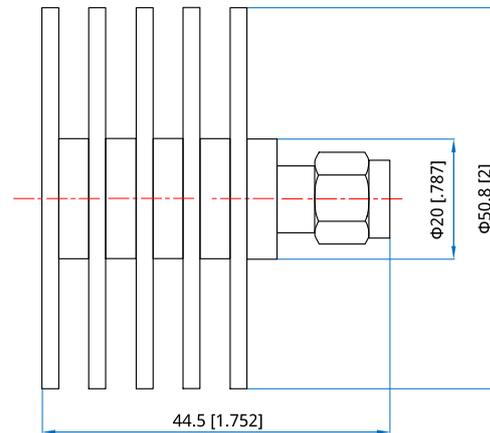
### Mechanical

Connector: 2.92mm  
 Size:  $\Phi 50.8 \times 44.5$ mm  
 $\Phi 2 \times 1.752$ in  
 Weight: 85g  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance:  $\pm 0.5$ mm [ $\pm 0.02$ in]

### How To Order

#### QCT4010-X-Y

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:  
 K - 2.92mm male  
 KF - 2.92mm female

#### Examples:

To order a termination, DC-40GHz, 2.92 male, specify QCT4010-40-K.

Customization is available upon request.

# QCT4020

## DC~40GHz, 20W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~40GHz  
 Average Power<sup>\*1</sup>: 20W@25°C max.  
 VSWR: 1.35 max.  
 Impedance: 50Ω

[1] Derated linearly to 1W@120°C.

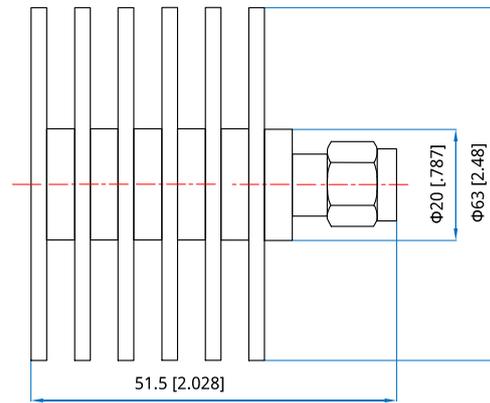
### Mechanical

Connector: 2.92mm  
 Size:  $\Phi 63 * 51.5\text{mm}$   
 $\Phi 2.48 * 2.028\text{in}$   
 Weight: Aluminum  
 Housing: 140g  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]

Tolerance:  $\pm 0.5\text{mm}$  [ $\pm 0.02\text{in}$ ]

### How To Order

**QCT4020-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

K - 2.92mm male

KF - 2.92mm female

Examples:

To order a termination, DC-40GHz, 2.92 male, specify QCT4020-40-K.

Customization is available upon request.

# QCT4050

## DC~40GHz, 50W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~40GHz  
 Average Power<sup>\*1</sup>: 50W@25°C max.  
 VSWR: 1.35 max.  
 Impedance: 50Ω

[1] Derated linearly to 2.5W@120°C.

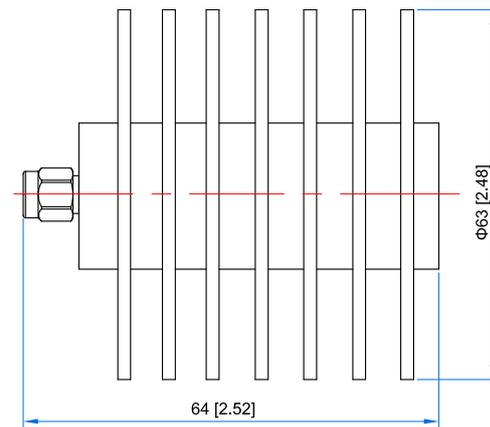
### Mechanical

Connector: 2.92mm  
 Size: Φ63\*64mm  
           Φ2.48\*2.52in  
 Weight: 168g  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

### How To Order

**QCT4050-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

K - 2.92mm male

KF - 2.92mm female

Examples:

To order a termination, DC-40GHz, 2.92 male, specify QCT4050-40-K.

Customization is available upon request.

# QCT2602

## DC~26.5GHz, 2W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~26.5GHz  
 Average Power<sup>1</sup>: 2W  
 Impedance: 50Ω  
 VSWR: 1.25 max.

[1] Derated linearly to 0.1W@120°C.

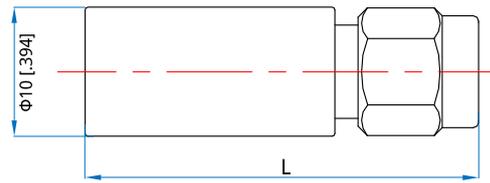
### Mechanical

Weight: 5~8g  
 Connectors: 2.92mm, 3.5mm, SMA  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or nickel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



L:	2.92mm		3.5mm		SMA	
	(M)	(F)	(M)	(F)	(M)	(F)
mm:	21.5	21	26.3	25.5	21.5	20
in:	0.846	0.827	1.035	1.004	0.846	0.787

Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

### How To Order

#### QCT2602-X-Y

X: Frequency in GHz

Y: Connector type

Connector naming rules:

K - 2.92mm

3 - 3.5mm

S - SMA

Female Connector - Add 'F' after connector name

Examples:

To order a termination, DC-26.5GHz, 2.92mm male, specify QCT2602-26.5-K.

Customization is available upon request.

# QCT2605

## DC~26.5GHz, 5W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~26.5GHz  
 Average Power<sup>†</sup>: 5W@25°C max.  
 Impedance: 50Ω  
 VSWR: 1.3 max. (SMA)  
 1.2 max. (3.5mm)

[1] Derated linearly to 0.25W@120°C.

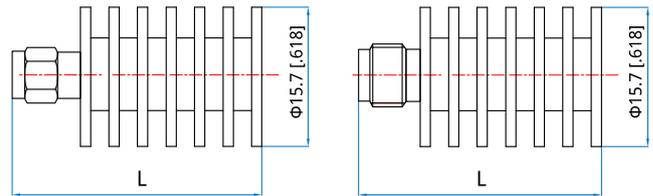
### Mechanical

Weight: 10g  
 Connectors: SMA, 3.5mm  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



Outline A

Outline B

Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

L=25.5mm, SMA male, Outline A  
 L=24.6mm, SMA female, Outline B  
 L=26.3mm, 3.5mm male, Outline A  
 L=25.5mm, 3.5mm female, Outline B

### How To Order

**QCT2605-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

- S - SMA male
- SF - SMA female
- 3 - 3.5mm male
- 3F - 3.5mm female

Examples:

To order a termination, DC-26.5GHz, 3.5mm male, specify QCT2605-26.5-3.

Customization is available upon request.

# QCT2610

## DC~26.5GHz, 10W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~26.5GHz  
 Average Power<sup>\*1</sup>: 10W@25°C max.  
 Impedance: 50Ω  
 VSWR: 1.30 max. (SMA)  
 1.25 max. (3.5mm)

[1] Derated linearly to 0.5W@120°C.

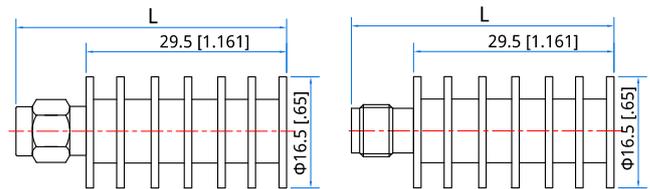
### Mechanical

Weight: 15g  
 Connectors: SMA, 3.5mm  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



Outline A

Outline B

Unit: mm [in]

Tolerance: ±0.5mm [±0.02in]

L=39.5mm, SMA male, Outline A  
 L=41mm, SMA female, Outline B  
 L=38.7mm, 3.5mm male, Outline A  
 L=40.2mm, 3.5mm female, Outline B

### How To Order

**QCT2610-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

S - SMA male  
 SF - SMA female  
 3 - 3.5mm male  
 3F - 3.5mm female

Examples:

To order a termination, DC-26.5GHz, SMA Male, specify QCT2610-26.5-S.

Customization is available upon request.

# QCT2625

## DC~26.5GHz, 25W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~26.5GHz  
 Average Power<sup>\*1</sup>: 25W@25°C max.  
 Impedance: 50Ω  
 VSWR: 1.30 max. (SMA)  
 1.25 max. (3.5mm)

[1] Derated linearly to 1.25W@120°C.

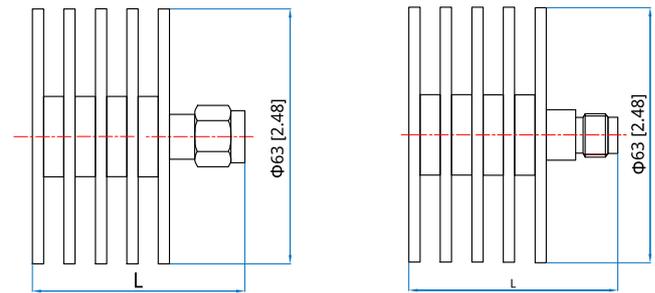
### Mechanical

Connectors: SMA, 3.5mm  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



Outline A

Outline B

Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

L=38.3mm, SMA male, Outline A  
 L=37.3mm, SMA female, Outline B  
 L=39.8mm, 3.5mm male, Outline A  
 L=39mm, 3.5mm female, Outline B

### How To Order

**QCT2625-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

S - SMA male  
 SF - SMA female  
 3 - 3.5mm male  
 3F - 3.5mm female

Examples:

To order a termination, DC-26.5GHz, SMA male, specify QCT2625-26.5-S.

Customization is available upon request.

# QCT2650

## DC~26.5GHz, 50W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~26.5GHz  
 Average Power<sup>\*1</sup>: 50W@25°C max.  
 Impedance: 50Ω  
 VSWR: 1.30 max. (SMA)  
 1.25 max. (3.5mm)

[1] Derated linearly to 2.5W@120°C.

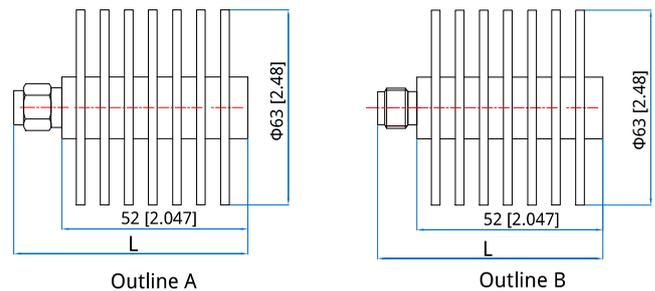
### Mechanical

Weight: 160g max.  
 Connectors: SMA, 3.5mm  
 Housing: Aluminum  
 Outer Conductor: Gold plated brass or stainless steel  
 Male Inner Conductor: Gold plated brass  
 Female Inner Conductor: Gold plated beryllium copper

### Environmental

Temperature: -55~+85°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

L=62mm, SMA male, Outline A  
 L=61mm, SMA female, Outline B  
 L=63.5mm, 3.5mm male, Outline A  
 L=62.7mm, 3.5mm female, Outline B

### How To Order

**QCT2650-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

S - SMA male  
 SF - SMA female  
 3 - 3.5mm male  
 3F - 3.5mm female

Examples:

To order a termination, DC-26.5GHz, SMA male, specify QCT2650-26.5-S.

Customization is available upon request.

# QCT26K1

## DC~26.5GHz, 100W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range:	DC~26.5GHz
Average Power*1:	100W
Impedance:	50Ω
VSWR:	1.4 max.

[1] Derated linearly to 5W@120°C.

### Mechanical

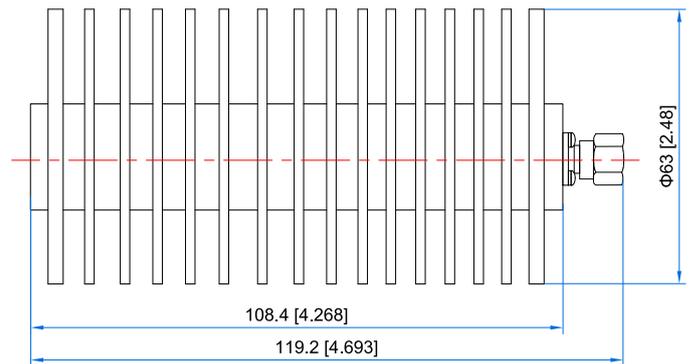
Size*2:	Φ63*108.4mm Φ2.48*4.268in
Weight:	400g
Connectors:	SMA
Housing:	Aluminum
Outer Conductor:	Gold plated brass
Male Inner Conductor:	Gold plated brass
Female Inner Conductor:	Gold plated beryllium copper

[2] Exclude connectors.

### Environmental

Temperature:	-55~+85°C
--------------	-----------

### Outline Drawings



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

### How To Order

#### QCT26K1-X-Y

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:  
 S - SMA male  
 SF - SMA female

Examples:  
 To order a termination, DC-26.5GHz, SMA male, specify QCT26K1-26.5-S.

Customization is available upon request.

# QCT1801

## DC~18GHz, 1W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching

### Electrical

Frequency Range: DC~18GHz  
 Average Power: 1W  
 Impedance: 50Ω  
 VSWR: 1.25 max.

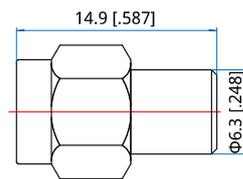
### Mechanical

Size:  $\Phi 6.3 \times 14.9$ mm  
 $\Phi 0.248 \times 0.587$ in  
 Weight: 10g max.  
 Connector: SMA Male  
 Outer Conductor: Stainless steel  
 Dielectric: PTFE  
 Inner Conductor: Beryllium copper

### Environmental

Temperature: -45~+85°C

### Outline Drawings



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

### How To Order

**QCT1801-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

S - SMA male

Examples:

To order a termination, DC-18GHz, SMA male, specify QCT1801-18-S.

Customization is available upon request.

# QCT1802

## DC~18GHz, 2W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 2W@25°C max.  
 Impedance: 50Ω

[1] Derated linearly to 0.1W@120°C.

### VSWR

Frequency (GHz)	VSWR <sup>*2</sup> (max.)	VSWR <sup>*3</sup> (max.)
DC~4	1.20	1.15
DC~8	1.25	1.20
DC~12.4	1.30	1.25
DC~18	1.40	1.30

[2] N connector

[3] SMA connector

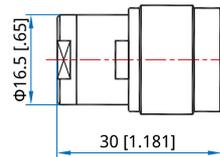
### Mechanical

Connectors: N, SMA

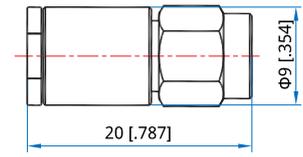
### Environmental

Temperature: -55~+125°C

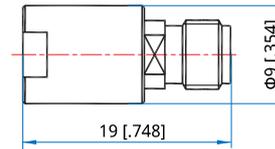
### Outline Drawings



Outline A



Outline B



Outline C

Unit: mm [in]

Tolerance: ±1mm [±0.04in]

### How To Order

**QCT1802-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N male (Outline A)

NF - N female

S - SMA male (Outline B)

SF - SMA female (Outline C)

Examples:

To order a termination, DC-12.4GHz, SMA male, specify QCT1802-12.4-S.

Customization is available upon request.

# QCT1805

## DC~18GHz, 5W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 5W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 0.25W@120°C.

### VSWR

Frequency (GHz)	VSWR <sup>*2</sup> (max.)	VSWR <sup>*3</sup> (max.)
DC~4	1.20	1.15
4~8	1.25	1.20
8~12.4	1.30	1.25
12.4~18	1.40	1.30

[2] N connector  
 [3] SMA connector

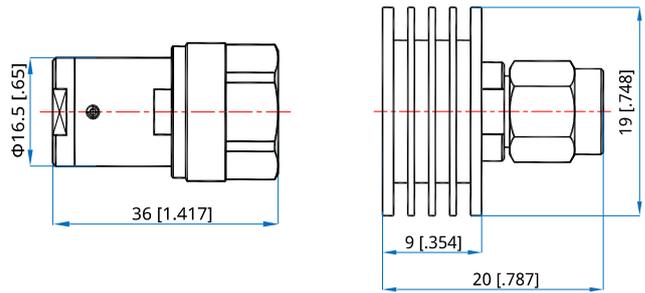
### Mechanical

Connectors: N, SMA

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Outline A

Outline B

Unit: mm [in]  
 Tolerance: ±1mm [±0.04in]

### How To Order

**QCT1805-X-Y**

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:

- N - N male (Outline A)
- NF - N female
- S - SMA male (Outline B)
- SF - SMA female

Examples:

To order a termination, DC-12.4GHz, SMA male, specify QCT1805-12.4-S.

Customization is available upon request.

# QCT1810

DC~18GHz, 10W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



## Electrical

Frequency Range: DC~18GHz  
 Average Power\*1: 10W@25°C max.  
 Impedance: 50Ω

[1] Derated linearly to 0.5W@120°C.

## VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.20
4~8	1.25
8~12.4	1.35
12.4~18	1.40

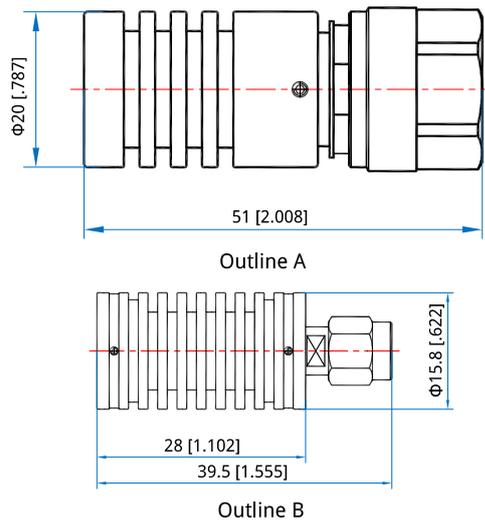
## Mechanical

Connectors: N, SMA

## Environmental

Temperature: -55~+125°C

## Outline Drawings



Unit: mm [in]  
 Tolerance: ±1.6mm [±0.06in]

## How To Order

**QCT1810-X-Y**

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:

- N - N male (Outline A)
- NF - N female
- S - SMA male (Outline B)
- SF - SMA female

Examples:

To order a termination, DC-12.4GHz, N male, specify QCT1810-12.4-N.

Customization is available upon request.

# QCT1820

## DC~18GHz, 20W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 20W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 1W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.20
4~8	1.25
8~12.4	1.35
12.4~18	1.40

### Mechanical

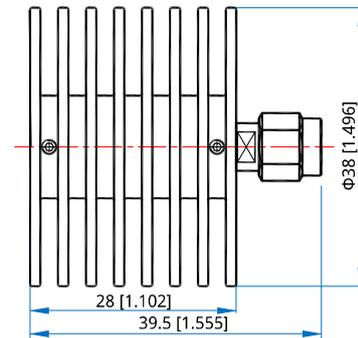
Size<sup>\*2</sup>: Φ38\*28mm  
 Φ1.496\*1.102in  
 Connector: SMA, N

[2] Exclude connectors.

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

### How To Order

**QCT1820-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

- N - N male
- NF - N female
- S - SMA male
- SF - SMA female

Examples:

To order a termination, DC-18GHz, SMA male, specify QCT1820-18-S.

Customization is available upon request.

# QCT1825

## DC~18GHz, 25W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 25W@25°C max.  
 Impedance: 50Ω

[1] Derated linearly to 1.25W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.20
4~8	1.25
8~12.4	1.35
12.4~18	1.40

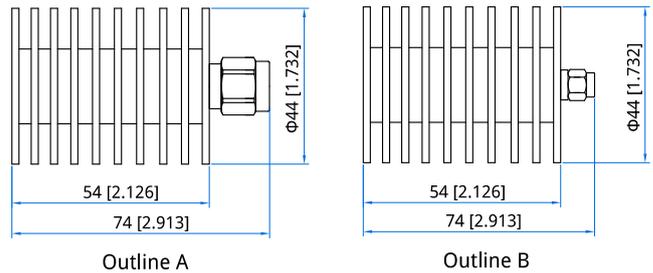
### Mechanical

Connectors: N, SMA

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±1.5mm [±0.06in]

### How To Order

**QCT1825-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N male (Outline A)

NF - N female

S - SMA male (Outline B)

SF - SMA female

Examples:

To order a termination, DC~18GHz, SMA male, specify QCT1825-18-S.

Customization is available upon request.

# QCT1850

DC~18GHz, 50W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



## Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 50W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 2.5W@120°C.

## VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.20
4~8	1.25
8~12.4	1.35
12.4~18	1.40

## Mechanical

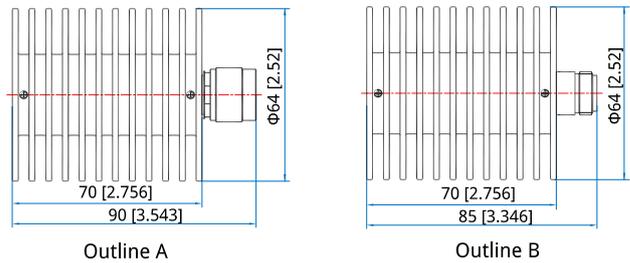
Size<sup>\*2</sup>: Φ64\*70mm  
 Φ2.52\*2.756in  
 Connector: N, SMA

[2] Exclude connectors.

## Environmental

Temperature: -55~+125°C

## Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.5mm [±0.02in]

## How To Order

**QCT1850-X-Y**

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:

- N - N male (Outline A)
- NF - N female (Outline B)
- S - SMA male
- SF - SMA female

Examples:

To order a termination, DC-12.4GHz, N male, specify QCT1850-12.4-N.

Customization is available upon request.

# QCT18K1

DC~18GHz, 100W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



## Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 100W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 5W@120°C.

## VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.15
4~8	1.20
8~12.4	1.25
12.4~18	1.35

## Mechanical

Size<sup>\*2</sup>: Φ64\*121mm  
 Φ2.52\*4.764in

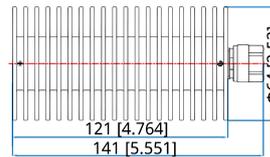
Connector: N, SMA

[2] Exclude connectors.

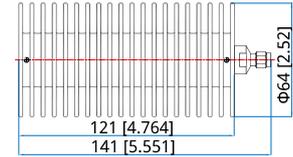
## Environmental

Temperature: -55~+125°C

## Outline Drawings



Outline A



Outline B

Unit: mm [in]

Tolerance: ±1.5mm [±0.06in]

## How To Order

### QCT18K1-X-Y

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N male (Outline A)

S - SMA male (Outline B)

Examples:

To order a termination, DC-4GHz, N male, specify QCT18K1-4-N.

Customization is available upon request.

# QCT18K15

## DC~18GHz, 150W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>†</sup>: 150W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 7.5W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.2
4~8	1.25
8~12.4	1.35
12.4~18	1.45

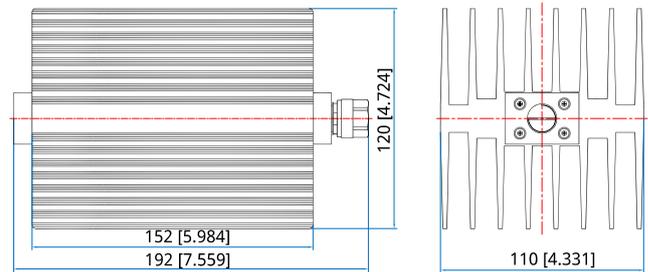
### Mechanical

Size: 192\*120\*110mm  
 7.559\*4.724\*4.331in  
 Connector: N

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]

Tolerance: ±2mm [±0.08in]

### How To Order

**QCT18K15-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N Male

NF - N Female

Examples:

To order a termination, DC-18GHz, N male, specify QCT18K15-18-N

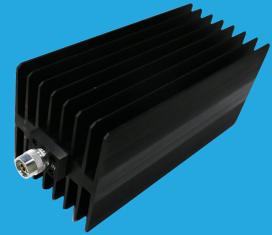
Customization is available upon request.

# QCT18K2

## DC~18GHz, 200W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 200W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 10W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.2
4~8	1.25
8~12.4	1.35
12.4~18	1.4

### Mechanical

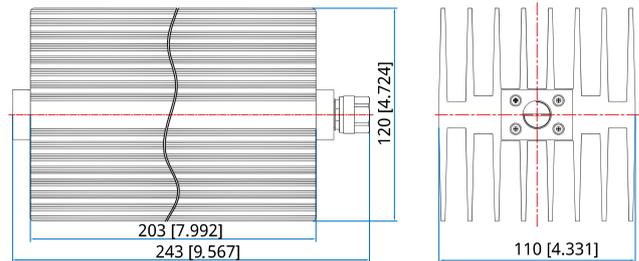
Size<sup>\*2</sup>: 203\*110\*120mm  
 7.992\*4.331\*4.724in  
 Connector: N Male

[2] Exclude connectors.

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±1mm [±0.04in]

### How To Order

#### QCT18K2-X-Y

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:  
 N - N

Examples:

To order a termination, DC-18GHz, N male, specify QCT18K2-18-N

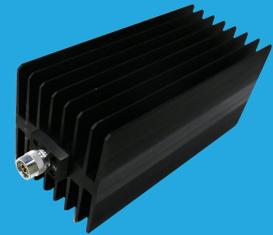
Customization is available upon request.

# QCT18K25

## DC~18GHz, 250W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>†</sup>: 250W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 12.5W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.2
4~8	1.25
8~12.4	1.35
12.4~18	1.45

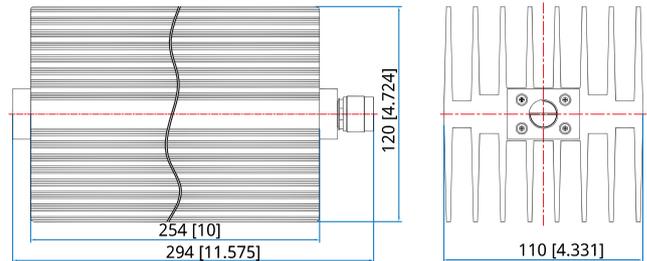
### Mechanical

Size: 294\*110\*120mm  
 11.575\*4.331\*4.724in  
 Connector: N

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±1mm [±0.04in]

### How To Order

#### QCT18K25-X-Y

X: Frequency in GHz  
 Y: Connector type

Connector naming rules:

N - N Male  
 NF - N Female

Examples:

To order a termination, DC-18GHz, N male, specify QCT18K25-18-N

Customization is available upon request.

## QCT18K3

### DC~18GHz, 300W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



#### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 300W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 15W@120°C.

#### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.2
4~8	1.25
8~12.4	1.35
12.4~18	1.45

#### Mechanical

Size<sup>\*2</sup>: 305\*120\*110mm  
 12.008\*4.724\*4.331in

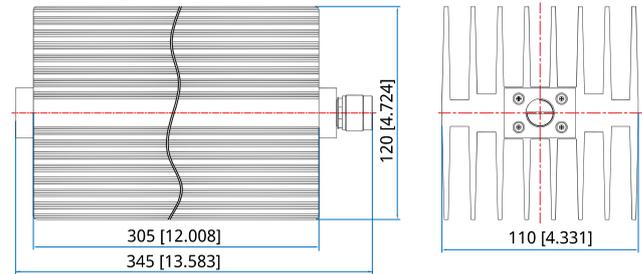
Connector: N

[2] Exclude connectors.

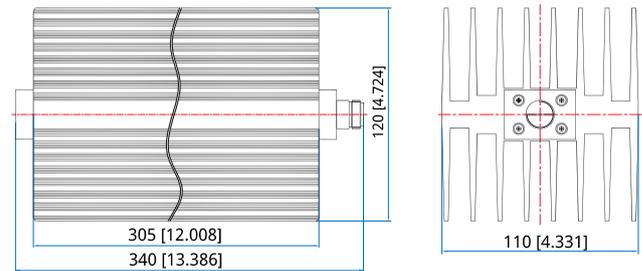
#### Environmental

Temperature: -55~+125°C

#### Outline Drawings



Outline A



Outline B

Unit: mm [in]  
 Tolerance: ±3mm [±0.12in]

#### How To Order

##### QCT18K3-X-Y

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N male (Outline A)

NF - N female (Outline B)

Examples:

To order a termination, DC-12.4GHz, N male, specify  
 QCT18K3-12.4-N

Customization is available upon request.

# QCT18K5

## DC~18GHz, 500W

Features:  
 \* Low VSWR  
 \* Broadband

Applications:  
 \* Transmitters  
 \* Antennas  
 \* Laboratory Test  
 \* Impedance Matching



### Electrical

Frequency Range: DC~18GHz  
 Average Power<sup>\*1</sup>: 500W@25°C  
 Impedance: 50Ω

[1] Derated linearly to 25W@120°C.

### VSWR

Frequency (GHz)	VSWR (max.)
DC~4	1.2
4~8	1.25
8~12.4	1.35
12.4~18	1.6

### Mechanical

Size<sup>\*2</sup>: 509\*120\*110mm  
 20.039\*4.724\*4.331in

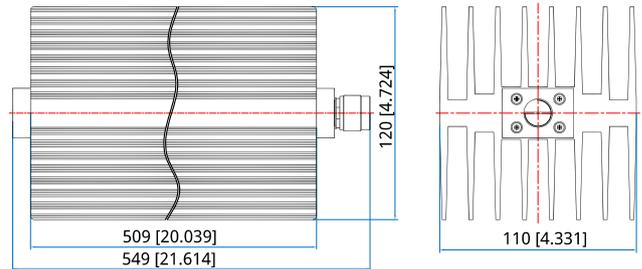
Connector: N

[2] Exclude connectors.

### Environmental

Temperature: -55~+125°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±1mm [±0.04in]

### How To Order

**QCT18K5-X-Y**

X: Frequency in GHz

Y: Connector type

Connector naming rules:

N - N male

NF - N female

Examples:

To order a termination, DC-12.4GHz, N male, specify  
 QCT18K5-12.4-N

Customization is available upon request.

# Connectors Nomenclature Reference

## Connector Names

1	1.0mm (110GHz)	K	2.92mm (40GHz)
2	2.4mm (50GHz)	L	L27
3	3.5mm (33GHz)	M	MCX (6GHz)
4	4.3/10 (8GHz)	N	N (18GHz)
7	7/16 DIN (L29)	P	SMP (40GHz)
A	SSMA (40GHz)	Q	QMA
B	BNC (4GHz)	S	SMA (26.5GHz)
E	SC (11GHz in theory, Usually 6GHz)	T	TNC (18GHz)
G	Mini-SMP (mateable with GPPO & SSMP, 65GHz)	V	1.85mm (67GHz)
I	BMA (18GHz)	X	MMCX (40GHz)
J	APC-7 (7mm,18GHz)		

## Gender

M: Male (Plug)

F: Female (Jack)

## Multiple Connectors

Some parts have several connectors. Most parts have their default connector options. Abbreviation naming is applied for default connector options. In full naming, it is name-gender pairs. For example: “SM” stand for SMA Male connector, and “NF” means N Female connector.

# Broad Band & High Power

## Microwave & Millimeter Wave Components



### Qualwave Inc.

No. 366, North Lakeside Road,  
Tianfu New Area, Chengdu,  
610015, China

Phone: +86-28-6115-4929  
E-mail: [sales@qualwave.com](mailto:sales@qualwave.com)  
Web: [www.qualwave.com](http://www.qualwave.com)

