

## QCE034

### Low PIM

Features:  
\* Low PIM

Applications:  
\* Phased-array Radar  
\* Instrument  
\* Interconnection in and between equipment

#### Electrical

Frequency: DC~18GHz  
Cut-off Frequency: 168GHz  
Impedance: 50Ω  
Velocity of Propagation: 77%  
Shielding Effectiveness: 165dB  
Voltage Withstand: 100V DC

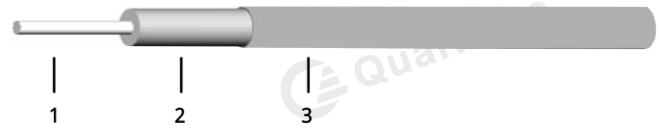
#### Mechanical

Bend Radius (installation): 4.3mm  
Weight: 3.4g/m

#### Environmental

Temperature: -268~+150°C

#### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.21	Silver plated copper nickel alloy
2	Dielectric	0.61	PTFE
3	Outer Conductor	0.86	Copper nickel alloy

#### Attenuation & Power Handling

Frequency (GHz)	1	2	3	6	8	10	12.4	16	18
Attenuation*1 (dB/100m)	316.7	449.7	552.4	786.5	911.4	1022.2	1142	1303	1385.1
Average Power*2 (W)	102	72	58	41	35	32	28	25	23

[1] VSWR:1.0; Ambient: +25°C (77°F)

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

Calculate Cable Attenuation: Attenuation (dB/100m) =  $9.921500 * \sqrt{F} \text{ (MHz)} + 0.003000 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) =  $0.03 * \sqrt{F} \text{ (GHz)}$

#### How To Order

##### QCE034-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QCE034 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QCE034-18-SSF-0.5.

Connector naming rules:

2 - 2.4mm (40GHz, VSWR 1.35)

K - 2.92mm (40GHz, VSWR 1.35)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

G - Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)

N - N (12GHz, VSWR 1.2)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

B - BNC (4GHz, VSWR 1.4)

D - SMB (4GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)