

QCE020

Low PIM

Features:
* Low PIM

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

Electrical

Frequency: DC~18GHz
Cut-off Frequency: 240GHz
Impedance: 50Ω
Velocity of Propagation: 70%
Shielding Effectiveness: 165dB
Voltage Withstand: 100V DC

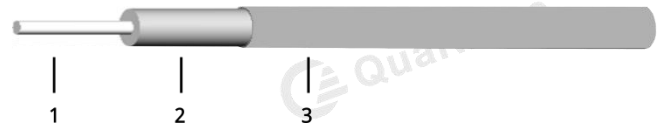
Mechanical

Bend Radius (installation): 2.9mm
Weight: 2g/m

Environmental

Temperature: -268~+150°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.127	Silver plated copper nickel alloy
2	Dielectric	0.432	PTFE
3	Outer Conductor	0.580	Copper nickel alloy tube

Attenuation & Power Handling

Frequency (GHz)	1	2	3	6	8	10	12.4	16	18
Attenuation*1 (dB/100m)	563.4	796.7	975.8	1380	1593.5	1781.5	1983.8	2253.5	2390.2
Average Power*2 (W)	64	45	37	26	23	20	18	16	15

[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) = $17.815400 * \sqrt{F} \text{ (MHz)} + 0.000001 * F \text{ (MHz)}$

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

How To Order

QCE020-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QCE020 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QCE020-18-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)