

QTE

Low Cost

Features:
 * Phase Stability
 * Low PIM

Applications:
 * Laboratory Test
 * Interconnection in and between equipment

Electrical

Frequency: DC~18GHz
 Cut-off Frequency: 34GHz
 Impedance: 50Ω
 Velocity of Propagation: 70%
 Shielding Effectiveness: 90dB min.
 Voltage Withstand: 1500V DC

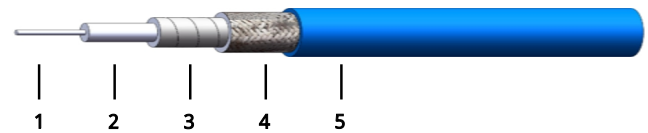
Mechanical

Bend Radius (installation): 20.0mm
 Bend Radius (repeated): 40.0mm
 Weight: 49g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	3.00	PTFE
3	Inner Shield	3.20	Silver-plated copper tape
4	Outer Shield	3.55	Silver-plated copper braid
5	Jacket	4.00	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2.4	3	6	8	10	12.4	18
Attenuation*1 (dB/100m)	19.9	26.2	38.2	62.5	71.1	107.5	128.3	147.6	169.4	216.1
Average Power*2 (W)	512	423	290	177	156	103	86	75	65	51

[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) = $1.082677 * \sqrt{F} \text{ (MHz)} + 0.003937 * F \text{ (MHz)}$

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

How To Order

QTE-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

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

Connector naming rules:

S - SMA (18GHz, VSWR 1.25)

N - N (18GHz, VSWR 1.3)

Female Connector - Add 'F' after connector name

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

Mating Connector

QCS-MG-141-3

SMA male, Stainless steel



QCN-MB-141-3

N male, Nickel Plated Brass



QCS-FB-141-1

SMA female, Gold plated brass

QCN-FB-141-1

N female, Nickel Plated Brass

