

# QE034

## Low PIM

Features:  
\* Low PIM

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

### Electrical

Frequency:	DC~40GHz
Cut-off Frequency:	154GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	165dB
Voltage Withstand:	100V DC

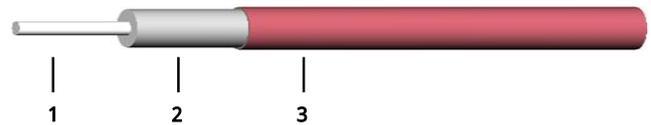
### Mechanical

Bend Radius (installation):	1.6mm
Weight:	3g/m

### Environmental

Temperature: -55~+125°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.203	Silver plated copper-clad steel
2	Dielectric	0.640	PTFE
3	Outer Conductor	0.864	Seamless copper tube

### Attenuation & Power Handling

Frequency (GHz)	1	2	3	6	8	10	12.4	18	26.5	40
Attenuation*1 (dB/100m)	157.9	224.9	277.1	397.0	461.5	519.0	581.6	709.6	874.5	1096.0
Average Power*2 (W)	102	72	58	41	35	31	28	23	18	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) =  $4.9002 * \sqrt{F} (\text{MHz}) + 0.0029 * F (\text{MHz})$

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

### How To Order

#### QE034-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QE034 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QE034-18-SSF-0.5.

Connector naming rules:

2 - 2.4mm (40GHz, VSWR 1.35)

K - 2.92mm (40GHz, VSWR 1.35)

G - Mini-SMP (mateable with GPP0 & SSMP, 40GHz, VSWR 1.5)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, 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)