

## QE141 Low PIM

Features:  
\* Low PIM

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

### Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	34GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	165dB min.
Voltage Withstand:	500V DC

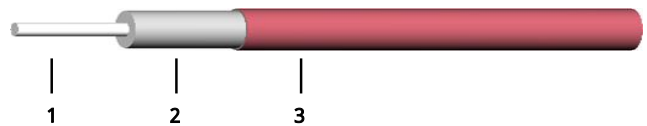
### Mechanical

Bend Radius (installation):	15mm
Weight:	46g/m

### Environmental

Temperature: -55~+125°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	2.98	PTFE
3	Outer Conductor	3.58	Ternary alloy plated seamless copper tube

### Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18	26.5
Attenuation*1 (dB/100m)	20.3	26.5	38.2	69.3	102.4	137.7	156.4	195.9	249.2
Average Power*2 (W)	1020	782	542	299	203	151	133	106	83

[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) =  $1.131702 * \sqrt{F} \text{ (MHz)} + 0.002450 * F \text{ (MHz)}$

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

### How To Order

#### QE141-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QE141 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QE141-18-SSF-0.5.

Connector naming rules:

3 - 3.5mm (26.5GHz, VSWR 1.3)

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)

## Mating Connector

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**QCK-MG-141-1**

2.92mm male, Stainless steel


**QCS-MG-141-3**

SMA male, Stainless steel


**QCS-MRB-141-4**

SMA male right angle, Gold plated brass

**QCS-MRG-141-3**

SMA male right angle, Stainless steel

**QCS-FB-141-1**

SMA female, Gold plated brass


**QCS-FL2B-141-1**

SMA female, 2-hole flange mount, Brass

**QCS-FL4B-141-1**

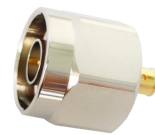
SMA female, 4-hole flange mount, Gold plated brass


**QCS-FHB-141-1**

SMA female bulk head, Brass

**QCN-MB-141-3**

N male, Nickel plated brass


**QCN-MRB-141-1**

N male right angle, Nickel plated brass


**QCN-MRB-141-2**

N male right angle, Gold plated brass


**QCN-FB-141-1**

N female, Nickel plated brass


**QCB-MB-141-1**

BNC male, Ternary alloy plated brass


**QCN-MRB-141-1**

N male right angle, Nickel plated brass