

# QG800

## Low Loss

Features:  
\* Low Insertion Loss

Applications:  
\* Telecom  
\* Interconnection between equipment

### Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	19GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2000V DC

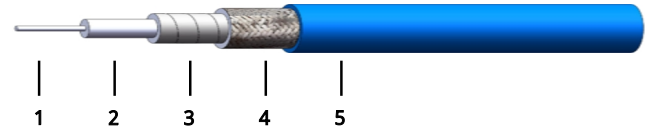
### Mechanical

Bend Radius (installation):	40.0mm
Bend Radius (repeated):	81.0mm
Weight:	120g/m

### Environmental

Temperature: -55~+125°C

### Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	2.30	Silver-plated copper
2	Dielectric	6.80	Low density PTFE
3	Inner Shield	6.95	Self-adhesive aluminum foil
4	Outer Shield	7.50	Silver-plated copper braid
5	Jacket	8.10	FEP

### Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18
Attenuation*1 (dB/100m)	8.0	10.5	15.1	27.3	40.1	53.8	61.0	76.3
Average Power*2 (W)	3141	2409	1674	926	629	469	413	331

[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) =  $0.448000 \times \sqrt{F} (\text{MHz}) + 0.000898 \times F (\text{MHz})$

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

### How To Order

#### QG800-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QG800 cable assembly, DC-18GHz, N male to N female, 0.5 meter, specify QG800-18-NNF-0.5.

Connector naming rules:

S - SMA (18GHz, VSWR 1.25)

N - N (18GHz, VSWR 1.25)

T - TNC (18GHz, 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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**QCS-MG-G800-1**

SMA male, Stainless steel

**QCS-FG-G800-1**

SMA female, Stainless Steel

**QCN-MG-G800-1**

N male, Stainless Steel

**QCN-FG-G800-1**N female, Stainless steel

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