

QA800

Ultra Low Loss & Phase Stable

- | | |
|---|---|
| Features:
* Low Insertion Loss
* High Phase Stability
* High Power
* Low PIM | Applications:
* Phased-array Radar
* Satellite Communication
* Avionics |
|---|---|

Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	19GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2500V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

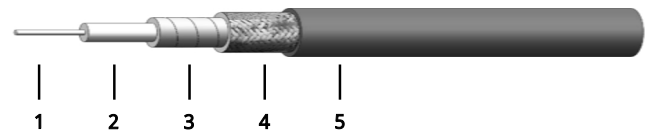
Mechanical

Bend Radius (installation):	39.0mm
Bend Radius (repeated):	79.0mm
Weight:	130g/m

Environmental

Temperature: -55~+165°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	2.30	Silver-plated copper
2	Dielectric	6.20	Low density PTFE
3	Inner Shield	6.44	Silver-plated copper tape
4	Outer Shield	7.05	Silver-plated copper braid
5	Jacket	7.90	FEP

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	8	12	18
Attenuation*1 (dB/100m)	4.6	8.0	10.4	14.8	21.1	30.2	37.3	43.4	53.9	67.0
Average Power*2 (W)	5817	3341	2579	1812	1270	887	717	616	497	399

[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) = 0.456300 * √F (MHz) + 0.000320 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB) = 0.03 * √F (GHz)

How To Order

QA800-X-Y-Z

- X: Frequency in GHz
 Y: Connector type
 Z: Length in meters

Examples:

To order a QA800 cable assembly, DC-18GHz, N male to SMA female, 0.5 meter, specify QA800-18-SFN-0.5.

Connector naming rules:

- S - SMA (18GHz, VSWR 1.25)
- N - N (18GHz, VSWR 1.25)
- T - TNC (18GHz, VSWR 1.25)
- E - SC (6GHz, VSWR 1.25)
- 7 - 7/16 (6GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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

Mating Connector

QCS-MG-A800-2

SMA male, Stainless steel

**QCN-FG-A800-1**

N female, Stainless steel

QCS-MRG-A800-1SMA male right angle,
Stainless steel**QCT-MG-A800-1**

TNC male, Stainless steel

QCS-FG-A800-2

SMA female, Stainless steel

**QCE-MG-A800-1**

SC male, Stainless steel

**QCN-MG-A800-2**

N male, Stainless steel

QC7-MB-A800-17/16 male, Nickel plated
brass**QCN-MRG-A800-1**N male, Right angle,
Stainless steel