

FA800

Ultra Low Loss & Phase Stable

Features:

- * Low Insertion Loss
- * High Phase Stability
- * High Power
- * Low PIM

Applications:

- * Phased-array Radar
- * Satellite Communication
- * Avionics

Electrical

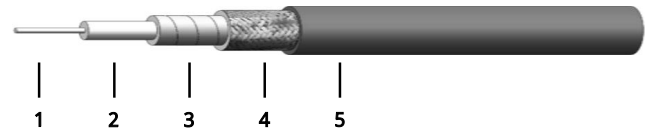
Frequency:	DC~18GHz
Cut-off Frequency:	19GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	2500V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

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) = $0.456300 * \sqrt{F \text{ (MHz)}} + 0.000320 * F \text{ (MHz)}$

 Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F \text{ (GHz)}}$
How To Order
FA800-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FA800 cable assembly, DC-18GHz, N male to SMA female, 0.5 meter, specify FA800-18-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

FCS-MG-A800-2

SMA male, Stainless steel

**FCN-FG-A800-1**

N female, Stainless steel

FCS-MRG-A800-1SMA male right angle,
Stainless steel**FCT-MG-A800-1**

TNC male, Stainless steel

FCS-FG-A800-2

SMA female, Stainless steel

**FCE-MG-A800-1**

SC male, Stainless steel

**FCN-MG-A800-2**

N male, Stainless steel

FC7-MB-A800-17/16 male, Nickel plated
brass**FCN-MRG-A800-1**N male, Right angle,
Stainless steel