

FG500

Low Loss

Features:

* Low Insertion Loss

Applications:

 * Telecom
 * Interconnection between equipment

Electrical

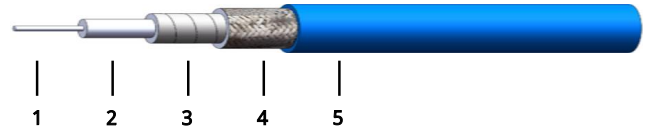
Frequency:	DC~18GHz
Cut-off Frequency:	28GHz
Impedance:	50Ω
Velocity of Propagation:	76%
Shielding Effectiveness:	70dB min.
Voltage Withstand:	1500V DC

Mechanical

Bend Radius (installation):	25.0mm
Bend Radius (repeated):	51.0mm
Weight:	60g/m

Environmental

Temperature: -55~+125°C

Construction


No.	Name	Size (mm)	Material
1	Inner Conductor	1.45	Silver-plated copper
2	Dielectric	4.20	Low density PTFE
3	Inner Shield	4.32	Self-adhesive aluminum foil
4	Outer Shield	4.65	Silver-plated copper braid
5	Jacket	5.10	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18
Attenuation*1 (dB/100m)	12.8	16.6	23.8	42.6	62.1	82.7	93.4	115.9
Average Power*2 (W)	1428	1098	766	428	293	220	195	157

[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) = $0.718000 \times \sqrt{F} (\text{MHz}) + 0.001088 \times F (\text{MHz})$

 Calculate Connector Attenuation: Attenuation (dB) = $0.03 \times \sqrt{F} (\text{GHz})$
How To Order
FG500-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FG500 cable assembly, DC-18GHz, N male to N female, 0.5 meter, specify FG500-18-NNF-0.5.

Connector naming rules:

3 - 3.5mm (18GHz, VSWR 1.2)

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

FCK-MG-A500-1

2.92mm male, Stainless steel

FC3-MG-A500-2

3.5mm male, Stainless steel

FC3-FG-A500-2

3.5mm female, Stainless steel

FCS-MG-A500-2

3.5mm male, Stainless steel

FCS-MRG-A500-2

SMA male, Right angle, Stainless steel

FCS-FG-A500-2

SMA female, Stainless steel



FCS-FHG-A500-1

SMA female, Bulk head, Stainless steel

FCN-MG-A500-4

N male, Stainless steel

FCN-MRG-A500-1

N male, Right angle, Stainless steel

FCN-FG-A500-1

N female, Stainless steel

FCT-MG-A500-2

TNC male, Stainless steel

