

FCE047 Low PIM

Features:
* Low PIM

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

Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	117GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	165dB
Voltage Withstand:	100V DC

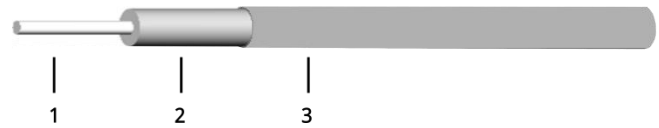
Mechanical

Bend Radius (installation):	4.2mm
Weight:	6.2g/m

Environmental

Temperature: -268~+150°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.3±0.015	Silver plated copper nickel alloy
2	Dielectric	0.95±0.03	PTFE
3	Outer Conductor	1.2±0.03	Copper nickel alloy

Attenuation & Power Handling

Frequency (GHz)	1	2	3	6	8	10	12.4	16	18
Attenuation*1 (dB/100m)	253.2	358.2	438.8	620.9	717.1	802	893.3	1015	1076.8
Average Power*2 (W)	147	104	85	60	52	46	42	37	35

[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) = $8.001000 * \sqrt{F} \text{ (MHz)} + 0.000186 * F \text{ (MHz)}$

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

How To Order

FCE047-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FCE047 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meters, specify FCE047-18-SSF-0.5.

Connector naming rules:

S - SMA

Female Connector - Add 'F' after connector name

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