

FE020 Low PIM

Features:
* Low PIM

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

Electrical

Frequency:	DC~40GHz
Cut-off Frequency:	110GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	165dB min.
Voltage Withstand:	100V DC

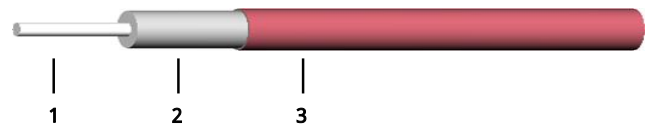
Mechanical

Bend Radius (installation):	1.27mm
Weight:	2g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.127	Silver-plated copper
2	Dielectric	0.432	PTFE
3	Outer Conductor	0.580	Ternary alloy plated seamless copper tube

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	3	6	10	12.4	18	26.5	40
Attenuation*1 (dB/100m)	130	170	240	420	600	780	870	1060	1300	1620
Average Power*2 (W)	99	77	54	31	22	17	15	12	10	8

[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) = $7.5016 * \sqrt{F} \text{ (MHz)} + 0.0029 * F \text{ (MHz)}$

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

How To Order

FE020-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FE020 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify FE020-18-SSF-0.5.

Connector naming rules:

2 - 2.4mm (40GHz, VSWR 1.35)

K - 2.92mm (40GHz, VSWR 1.35)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

G - Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)

N - N (12GHz, VSWR 1.2)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

B - BNC (4GHz, VSWR 1.4)

D - SMB (4GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

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