

Flexible RF Cables & Assemblies

FPA-360

Ultra Low Loss & Phase Stable

Features:

- Low insertion loss
- High Phase Stability
- High Power
- Low PIM

Applications:

- Phase-array Radar
- Satellite Communication
- Avionics

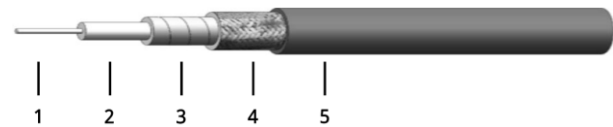
Electrical

Frequency	DC-40GHz
Cut-off Frequency	48GHz
Impedance	50Ω
Velocity of Propagation	82%
Shielding Effectiveness	90dB Min.
Voltage Withstand	500V DC
PIM	-155dBc
Phase Stability	750PPM@ -55°C ~ +85°C Max.

Environmental

Temperature -55 ~ +165°C

Construction



No	Name	Size (mm)	Material
1	Inner Conductor	0.91	Silver-plated copper
2	Dielectric	2.50	Low density PTFE
3	Inner Shield	2.66	Silver-plated copper tape
4	Outer Shield	3.11	Silver-plated copper braid
5	Jacket	3.60	PFA

Mechanical

Bend Radius (installation/ repeated)	18.0mm / 36mm
Weight	33g/m

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	8	12	18	26.5	40
Attenuation ^[1] (dB/100m)	11.8	20.4	26.4	37.5	53.4	76.1	93.9	109.0	134.6	166.7	204.8	255.7
Average Power ^[2] (W)	1626	936	723	509	358	251	203	175	142	115	93	75

[1] VSWR: 1.0; Ambient: +25°C (77°F); Raw cable

[2] VSWR: 1.0; Ambient: +40°C (104°F); Sea cable

Calculate Cable Attenuation: Attenuation (dB/100m) = 1.168470 * $\sqrt{F (MHz)}$ + 0.000550 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB/100m) = 0.03 * $\sqrt{F (MHz)}$

Connector Types:

- 2.4mm (40GHz, VSWR 1.35)
- 2.92mm (40GHz, VSWR 1.35)
- SSMA (40GHz, VSWR 1.35)
- 3.5mm (33GHz VSWR 1.35)
- SMA (26.5GHz, VSWR 1.3)
- N (18GHz, VSWR 1.25)
- TNC (18GHz, VSWR 1.3)

Note: VSWR increase 0.1 (Right Angle)