

Flexible RF Cables & Assemblies

FPH-280

Flexible, Alternate to semi-rigid cable

Features:

- Phase Stability
- Low PIM

Applications:

- Phase-array Radar
- Interconnect in and between equipment

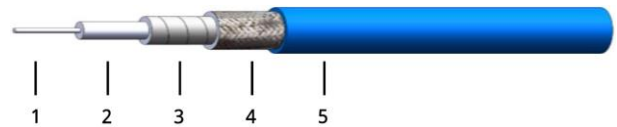
Electrical

Frequency	DC-40GHz
Cut-off Frequency	62GHz
Impedance	50Ω
Velocity of Propagation	70%
Shielding Effectiveness	90dB Min.
Voltage Withstand	500V DC

Environmental

Temperature -55 ~ +125°C

Construction



Mechanical

Bend Radius (installation/ repeated)	13mm / 26mm
Weight	22g/m

No	Name	Size (mm)	Material
1	Inner Conductor	0.53	Silver-plated copper
2	Dielectric	1.63	PTFE
3	Inner Shield	1.83	Silver-plated copper tape
4	Outer Shield	2.18	Silver-plated copper braid
5	Jacket	2.65	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2.4	3	6	8	10	12.4	18	26.5	40
Attenuation ^[1] (dB/100m)	37.0	48.2	69.3	110.7	125.0	183.7	216.4	246.1	279.0	348.2	440.8	570.9
Average Power ^[2] (W)	187	171	119	74	66	45	38	33	30	24	19	14

[1] VSWR: 1.0; Ambient: +25°C (77°F)

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

Calculate Cable Attenuation: Attenuation (dB/100m) = $2.066929 * \sqrt{F (MHz)} + 0.003937 * F (MHz)$

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)
- SMP (26.5GHz, VSWR 1.3)
- SSMA (26.5GHz, VSWR 1.3)
- SMA (26.5GHz, VSWR 1.3)
- Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)
- N (18GHz, VSWR 1.25)
- MMCX (6GHz, VSWR 1.3)
- MCX (6GHz, VSWR 1.3)
- BNC (4GHz, VSWR 1.4)
- SMB (4GHz, VSWR 1.25)

Note: VSWR increase 0.1 (Right Angle)