FILPAL
Empowering RF Innovations

Semi-Flexible RF Cables

FPD-086

Hand Formable

Features:
- Hand formable
- Quick and easy assembly

Applications:
- Instrumentation
- Laboratory test
- Interconnection

Electrical

Frequency	DC-40GHz
Cut-off Frequency	61GHz
Impedance	50Ω
Velocity of Propagation	70%
Shielding Effectiveness	100dB Min.
Voltage Withstand	1000V DC

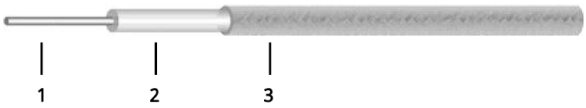
Mechanical

Bend Radius (installation/ repeated)	10mm / 20mm
Weight	20g/m

Environmental

Temperature	-55 ~ +150˚C

Construction



No	Name	Size (mm)	Material
1	Inner Conductor	0.53	Silver-plated copper
2	Dielectric	1.65	PTFE
3	Inner Shield	2.17	Tin-plated copper braid

Attenuation & Power Handling

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	12	18	26.5	40
Attenuation[1] (dB/100m)	21.7	38.2	49.8	71.9	104.6	153.8	193.8	291.6	373.6	476.6	622.6
Average Power[2] (W)	237	135	103	72	49	33	27	18	14	11	8

[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) = 2.115000 * $\sqrt{F\ (MHz)}$ + 0.004990 * $F\ (MHz)$

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

Connector Types:

- 2.4mm (40GHz, VSWR 1.8, typ.)
- 2.92mm (40GHz, VSWR 1.8, typ.)
- Mini-SMP (mateable with GPPO & SSMP, 40GHz, VSWR 1.8, typ.)
- SMP (26.5GHz, VSWR 1.7, typ.)
- SSMA (26.5GHz, VSWR 1.7, typ.)
- SMA (26.5GHz, VSWR 1.7, typ. / 18GHz, VSWR 1.35 typ.)
- N (18GHz, VSWR 1.35, typ.)
- MMCX (6GHz, VSWR 1.3, typ.)
- MCX (6GHz, VSWR 1.3, typ.)
- BNC (4GHz, VSWR 1.4, typ.)
- SMB (4GHz, VSWR 1.25, typ.)

Note: VSWR increase 0.1 (Right Angle)