

High Performance Test Cable Assemblies

FPT-110

Phase & Loss Stable, Long Flex Life

Features:

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

Applications:

- Laboratory Test
- Avionics
- Phased-array Radar
- Satellite Communication

Electrical

Frequency	DC-110GHz
Impedance	50Ω
Velocity of Propagation	80%
Shielding Effectiveness	90dB Min.
Voltage Withstand	400V DC

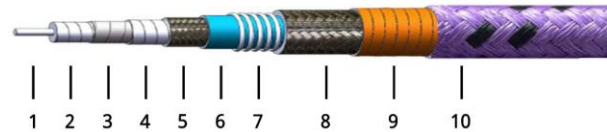
Mechanical

Bend Radius (installation/repeated)	10mm/20mm Min.
Armored Bend Radius (installation/repeated)	30mm/50mm Min.
Bending Life Cycle	50,000

Environmental

Temperature -55 ~ +125°C

Construction



No	Name	Size (mm)	Material
1	Inner Conductor	0.31	Silver-plated copper
2	Dielectric	0.88	Low density PTFE
3	Inner Shield	1	Silver-plated copper tape
4	Interlayer	1.2	Low density PTFE
5	Outer Shield	1.45	Silver-plated copper braid
6	Jacket	1.85	FEP
7-9	Armor (optional)	2.7	Composite
10		3.84	PTFE

Tolerance: ±0.02mm [±0.008in]

Attenuation & Power Handling

Frequency (GHz)	26.5	40	50	67	71	77	79	81	86	92	96	110
Attenuation ^[1] (dB/100m)	612	760	857	1003	1035	1081	1096	1111	1148	1191	1220	1314
Average Power ^[2] (W)	19	15	13	11	11	10	10	10	10	9	9	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) = 3.557846 * √F (MHz) + 0.0012207 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB/100m) = 0.03 * √F (MHz)

Connector Types:

- 1.0mm (110GHz, VSWR 1.5)

Note: VSWR increase 0.1 (Right Angle)