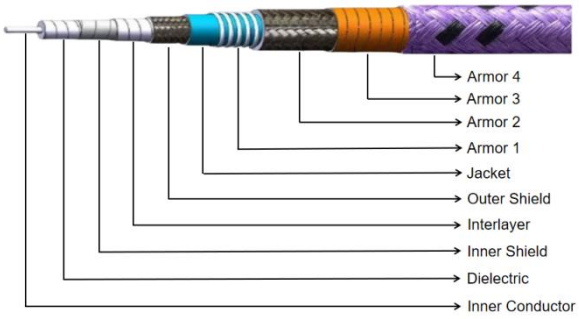
FS110TR

110GHz, 50 Ohm, Φ3.9mm, PTFE Armor, Flexible Cable. Solid Inner Conductor

Structure:



Structure Details:

Cable Type	Dia.(mm)	Material
Inner Conductor	0.31	Silver plated Copper
Dielectric	0.88	Low Density PTFE
Inner Shield	1.00	Silver Plated Copper Strip
Interlayer	1.20	Low Density PTFE
Outer Shield	1.45	Silver Plated Copper Braid
Jacket	1.85	FEP
Armor 1-2	2.70	Silver plated Copper
Armor 3-4	3.90	PTFE

*Armor is optional. Without armor, cable designation is FS110T. With armor, the cable designation is FS110TR.

Electrical Specifications:

Operating Freq.: 110 GHz
Cut-off Freq.: 128 GHz
Impedance: 50 Ω
VSWR: ≤1.5@110GHz
Phase Stability: ±10°
Amplitude Stability: ±0.1dB
Velocity of Propagation: 77%
Shielding Effectiveness: >90 dB
Dielectric Withstanding Voltage: 600 V DC

Mechanical Specifications:

Static Bending Radius: 10 mm (without armor)
20 mm (with armor)
Dynamic Bending Radius: 20 mm (without armor)
40 mm (with armor)
Bending Life: 100,000
Weight: 8 g/m (without armor)
33 g/m (with armor)

Environmental Specifications:

Temperature: -55~+125 °C

Typical Attenuation(dB/100m**) and Power handling (**W**)**

Freq.(GHz)	1	2	3	6	8	18	26.5	40	67	75	110
Attenuation[1]	113.7	161.6	198.5	282.9	328.0	499.3	611.5	760.4	1002.7	1065.9	1314.3
Avg. Power[2]	39	27	22	16	14	9	7	6	4	4	3
K1: 3.557846, K2: 0.001221											

1: Typical value@+25 °C,VSWR=1.0;
2: Typical value@+40 °C,atmospheric pressure;
3: Typical Cable Attenuation Calculation, Formula: $K1*\sqrt{F(MHz)}+K2*F(MHz)$;
4: Typical Connector Attenuation Calculation, Formula: $0.03*\sqrt{F(GHz)}$.

Cable Assemblies Naming Rule:

PN: Cable-Max. Freq.-Conn.1-Conn.2-Length(m)
Eg.: FS110TR-110-1M-1F-1 means FS110TR cable, with armor, DC-110GHz, 1.0mm(m)-1.0mm(f), 1m.