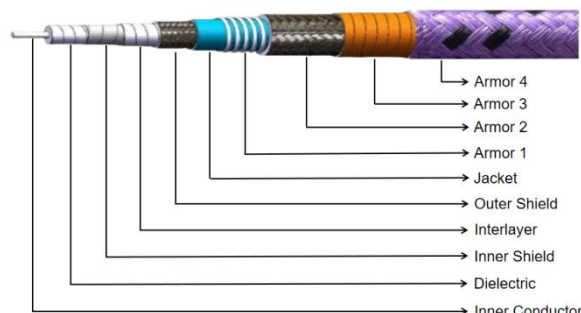


FS18TR

18GHz, 50 Ohm, Φ 10.4mm, PTFE armor, Flexible Cable.

Structure:



Structure Details:

Cable Type	Dia.(mm)	Material
Inner Conductor	2.39	Silver plated Copper
Dielectric	6.16	Low Density PTFE
Inner Shield	6.40	Silver Plated Copper Strip
Interlayer	6.70	Low Density PTFE
Outer Shield	7.25	Silver Plated Copper Braid
Jacket	7.80	FEP
A armor* 1-2	9.45	Silver plated Copper
A armor* 3-4	10.40	PTFE

*Armor is optional. Without armor, cable designation is FS18T. With armor, the cable designation is FS18TR.

Electrical Specifications:

Operating Freq.: 18 GHz

Cut-off Freq.: 18 GHz

Impedance: 50 Ω

VSWR: $\leq 1.2@18$ GHz

Phase Stability⁵: $\pm 3^\circ$

Amplitude Stability⁵: ± 0.10 dB

Velocity of Propagation: 84%

Shielding Effectiveness: >90 dB

Dielectric Withstanding Voltage: 2500 V DC

Mechanical Specifications:

Static Bending Radius: 39 mm (without armor)

52 mm (with armor)

Dynamic Bending Radius: 78 mm (without armor)

104 mm (with armor)

Bending Life: 0.2M; Mating Cycles: 2000 Cycles

Weight: 123 g/m (without armor)

220 g/m (with armor)

Environmental Specifications:

Temperature: -55~+125 $^\circ$ C

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

Freq.(GHz)	1	2	3	6	8	10	12.4	18
Attenuation ¹	16.7	23.8	29.3	42.1	48.9	55.0	61.7	75.3
Avg. Power ²	1602	1124	912	636	547	486	434	356
K1: 0.518300, K2: 0.000320								

1: Typical value@+25 $^\circ$ C,VSWR=1.0;

2: Typical value@+40 $^\circ$ C,atmospheric pressure;

3: Typical Cable Attenuation Calculation, Formula: $K1*\sqrt{F(\text{MHz})} + K2*F(\text{MHz})$;

4: Typical Connector Attenuation Calculation, Formula: $0.03*\sqrt{F(\text{GHz})}$.

5: Based on 360°bending on a Φ 104 mm mandrel

Cable Assemblies Naming Rule:

PN: Cable-Max. Freq.-Conn.1-Conn.2-Length(m)

Eg.: FS18TR-18-NM-NF-1 means an FS18TR armored cable, DC-18GHz, N(m)-N(f), 1m.

Add "R" for right-angle or "H" for bulkhead after the connector code (e.g., NMR, NFH)

Connectors Options	SMA (S)	N (N)	TNC (T)
Frequency (Max)	26.5GHz	18GHz	18GHz
VSWR (Max)	1.25:1	1.25:1	1.25:1