

FS086SR

40GHz, 50 Ohm, Φ2.18mm, Tri-metal plated seamless copper tube, Semi-rigid cable

Structure:



Structure Details

Cable Type	Dia.(mm)	Material
Inner Conductor	0.53	Silver plated Copper
Dielectric	1.68	PTFE
Outer Conductor	2.18	Tri-metal plated seamless copper tube

Electrical Specifications:

Operating Freq.: 40 GHz

Cut-off Freq.: 59 GHz

Impedance: 50 Ω

Velocity of Propagation: 70%

Shielding Effectiveness: >165 dB

Dielectric Withstanding Voltage: 500 V DC

Mechanical Specifications:

Static Bending Radius: 7 mm

Weight: 21 g/m

Environmental Specifications:

Temperature: -55°C~+125 °C

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

Freq.(GHz)	1	2	6	8	12.4	18	26.5	40
Attenuation ¹	64.9	93.1	166.6	194.7	247.6	304.9	379.9	482.7
Avg. Power ²	256	179	100	85	67	55	44	34
K1: 1.985320, K2: 0.002140								

1: Typical value@+25 °C,VSWR=1.0;

2: Typical value@+40 °C,atmospheric pressure;

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

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

Cable Assemblies Naming Rule:

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

Eg.: FS086R-40-KM-KF-1 means FS086SR cable, DC-40GHz, 2.92mm(m)-2.92mm(f), 1m.

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

Connectors Options	Frequency (Max)	VSWR (Max)	Body Material*
1.85mm (V)	40GHz	1.30:1	Passivated Stainless Steel
2.4mm (2)	40GHz	1.30:1	Passivated Stainless Steel
2.92mm (K)	40GHz	1.30:1	Passivated Stainless Steel
SSMP (M)	40GHz	1.30:1	Beryllium Copper
SMP (P)	40GHz	1.30:1	Beryllium Copper
SSMA (J)	40GHz	1.25:1	Passivated Stainless Steel
3.5mm (3)	33GHz	1.25:1	Passivated Stainless Steel
SMA (S)	26.5GHz	1.25:1	Nickel Plated Brass
MCX (C)	6GHz	1.25:1	Nickel Plated Brass
MMCX (X)	6GHz	1.25:1	Nickel Plated Brass

*Connector material is subject to availability; please confirm material when placing your order.