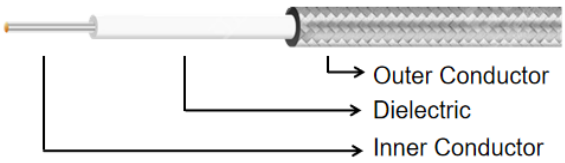
FS086SF

40GHz, 50 Ohm, Φ2.15mm OD, Tinned Copper Braid, Hand Formable RF Cable.

Cable Construction



Construction Details

Description	OD (mm)	Material
Inner Conductor	0.52	Silver-plated copper
Dielectric	1.65	PTFE
Outer Conductor	2.15	Tinned copper braid

Electrical Specifications:

Operating Frequency: DC to 40 GHz
Nominal Impedance: 50 Ω
Signal delay: 4.7ns/m
Velocity of Propagation: 70%
Shielding Effectiveness: ≥100 dB
Dielectric Withstanding Voltage: 1000 V DC

Mechanical Specifications:

Minimum Static Bend Radius: 6.0 mm
Minimum Dynamic Bend Radius: 20 mm
Weight: approx.16 g/m

Environmental Specifications:

Temperature Range: -55 °C to +125 °C

Typical Attenuation(dB/100m)[1] and CW Power handling (W)[2]

Freq. (GHz)	0.5	1	2	3	6	10	18	26.5	40
Attenuation	50	72	105	131	194	261	374	477	623
CW Power	229	162	115	94	66	51	38	31	26
K1: 2.115000; K2: 0.004990									

1: Typical values at +25°C with VSWR=1.0.
2: Typical values at +40°C, sea level, with VSWR=1.0.
3: Typical Cable Attenuation Calculation Formula: $K1 * \sqrt{F(MHz)} + K2 * F(MHz)$.
4: Typical Connector insertion loss: 0.03*$\sqrt{F(GHz)}$; multiply by the number of connectors.

Connector Options

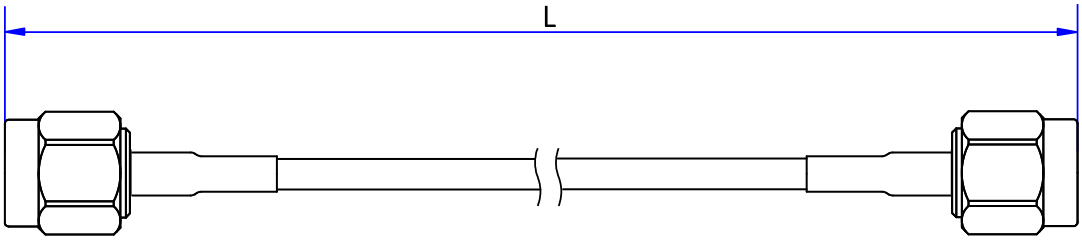
Connector Type	Male Code	Female Code	Max. Frequency	Max. VSWR
2.92mm	KM	KF	40 GHz	1.30:1
SMP	PM	PF	40 GHz	1.30:1
SMPM	MM	MF	40 GHz	1.30:1
3.5mm	3M	3F	33 GHz	1.30:1
SMA	SM	SF	18 GHz	1.25:1
N	NM	NF	18 GHz	1.25:1
BNC	BM	BF	4 GHz	1.25:1
SMB	EM	EF	4 GHz	1.25:1

Notes:

· Other connector types and configurations are available upon request.

· Add suffix “R” for a right-angle connector and “H” for a bulkhead connector, e.g., SMR and SFH.

Typical Cable Assembly Outline



Notes:

- Connector styles shown are for illustration only. Actual connector types and geometries depend on the selected configuration.
- L = cable assembly length. For straight and bulkhead connectors, L is measured end to end. For right-angle connectors, L is measured from the connector centerline.
- Standard label content includes the part number, serial number, and company logo, unless otherwise specified.

Ordering Information

PN: Cable-Max. Freq.-Connector Configuration-Length (m)
E.g.: *FS086SF-40-KMKF-1*means a FS086SF cable assembly, DC to 40GHz, 2.92mm(m)-2.92mm(m), 1m.
For identical connectors on both ends, add “2” to the connector code, e.g., KM2; otherwise, list both codes in End A-to-End B order, e.g., KMKF.