



Low Loss Test Cable

MegaPhase SuperFlex cable offers exceptional flexibility, with low-loss cable performance and superior phase and amplitude durability. This cable is well suited for applications employing temperature testing, phase critical system testing and ATE/ATS integrations where tight routing is required. The cable is constructed using a PTFE tape dielectric and our industry unique GrooveTube® technology to offer long term reliability.

Electrical Data

Maximum Frequency:	26.5 GHz
Impedance:	50 Ω nominal
Propagation Velocity:	80% nominal
Time Delay:	1.27 ns/ft (4.14 ns/m)
Shielding Effectiveness:	-110 dB minimum
Dielectric Withstanding Voltage:	10 kV at 60 Hz
Capacitance:	26.7 pF/ft (87.6 pF/m)

Mechanical Data

Finished Outer Diameter:	0.350 in (0.889 cm)
Static Bend Radius:	0.5 in (1.27 cm)
Weight:	0.045 lbs/ft (0.067 kg/m)
Max. Assembly Length:	25 ft (8 m)
Crush Resistance:	250 lbs/linear in (44.6 kg/linear cm)
Operating Temp. Range:	-76 to 230° F (-60 to 110° C)

Cable Construction

Inner Conductor:	Stranded Ag-plated Cu
Dielectric:	Boundless PTFE
Outer Conductor:	GrooveTube®
Standard Finish:	Neoprene

(a wide variety of other protective finishes and armors available)

Available Connectors

2.4mm, 2.92mm, 3.5mm, 7mm, BNC, SMA, TNC, Type N
(other connectors available)

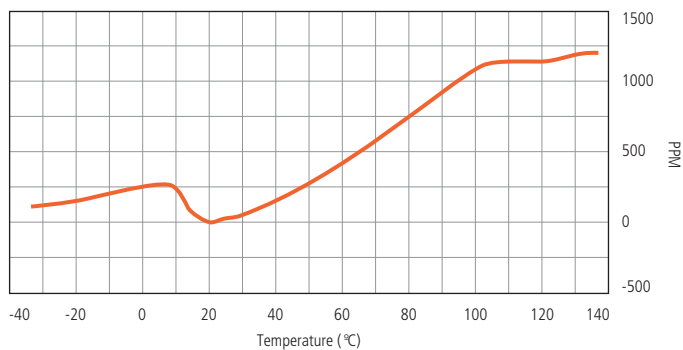
Specifications

Frequency		Part No.	Attenuation		Conn. Loss dB	VSWR
GHz	Band		db/ft	dB/m		
0.3	UHF	SF4	0.060	0.198	0.006	1.10
0.5			0.078	0.257	0.009	
0.8			0.100	0.327	0.012	
1.0	L		0.112	0.366	0.014	1.15
2.0	S		0.160	0.525	0.024	
2.4			0.176	0.577	0.027	
3.0		0.198	0.649	0.032		
4.0	C	SF8	0.230	0.756	0.040	1.20
6.0			0.286	0.939	0.055	
8.0			0.334	1.096	0.070	
10.0	X	SF18	0.377	1.238	0.084	1.25
12.4			0.425	1.393	0.101	
15.0			0.472	1.548	0.118	
18.0	Ku	SF26	0.522	1.713	0.139	1.30
20.0			0.554	1.818	0.152	
22.0			0.585	1.918	0.165	
24.0	K	SF26	0.614	2.016	0.178	1.35
26.5			0.650	2.133	0.194	

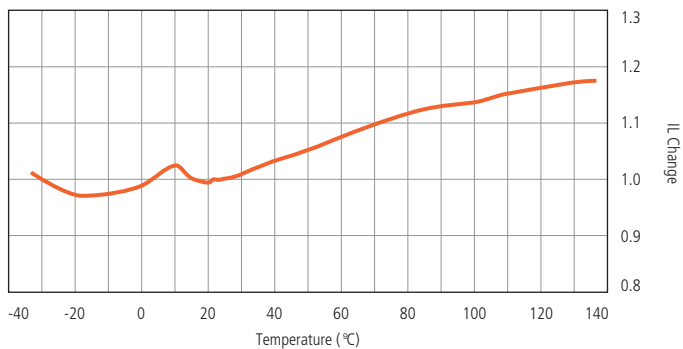
Note: Typical Insertion Loss dB = (Attenuation)(Length) + 2(Conn. Loss)
Attenuation at any frequency = (0.10806 x √freq GHz) + (0.00352 x freq GHz)

SuperFlex™ SF Series (cont'd)

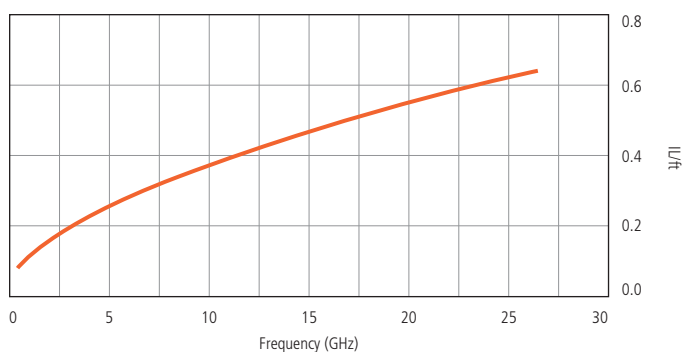
Phase Change vs. Temperature



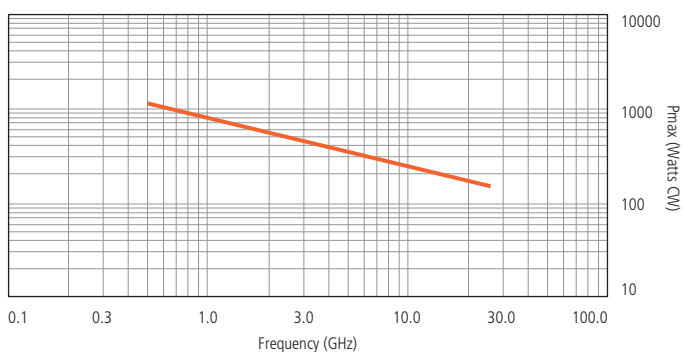
Insertion Loss vs. Temperature



Insertion Loss



Cable CW Power Handling



Note: Data at ambient temperature and sea level. Power handling of a cable assembly is also connector dependent and includes variables such as altitude, temperature and system VSWR. See website for connector power handling standards, including altitude, temperature and VSWR derating.