



With the right connections,
anything is possible.

SiteLine™ Armored Test Cables to 50 GHz

SiteLine Armored Test Cables

- Phase & Amplitude Stable
- Crush Proof 250 lbs/in (.46 kg/cm)
- Field and High Impact Production
- Rugged Armor
- Severe Environment
- Flight Line Testing

MegaPhase's SiteLine™ test cable assemblies are protected by a super-rugged armor designed for severe environments, such as flightline, outdoor antenna testing, and demanding production environments. This "gorilla proof" cable endures torque, twist, and crush forces better than any cable on the market, period. Ideal for use with FieldFox®, SiteMaster™, and Site Analyzer®.

Electrical Data

Maximum Frequency:

50 GHz

Impedance:

50 Ω nominal

Propagation Velocity:

69% nominal

Time Delay:

1.47 ns/ft (4.82 ns/m)

Shielding Effectiveness:

-115 dB minimum (cable only)

Dielectric Withstanding Voltage:

10 kV at 60 Hz

Capacitance:

29.0 pF/ft (95.1 pF/m)

Mechanical Data

Finished Outer Diameter:

0.5 in (1.27 cm)

Static Bend Radius:

3.0 in (7.62 cm)

Weight with Standard Jacket/Armor:

0.28 lbs/ft (0.417 kg/m)

Crush Resistance:

250 lbs/linear in (44.6 kg/linear cm)

Operating Temp. Range:

-85 to 248° F (-65 to 120° C)

Above 185° F (85° C) use "T" designation

Cable Construction

Inner Conductor: Solid Ag-plated Cu

Dielectric: PTFE

Outer Conductor: GrooveTube® Cu

Ruggedization: Metal Braid/
Metal Conduit

Standard Finish: Neoprene

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

Available Connectors

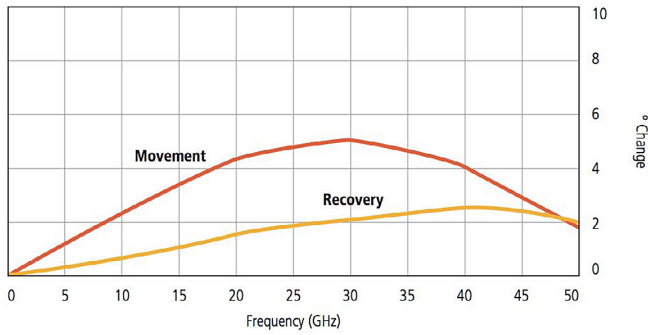
1.85mm, 2.4mm, 2.92mm, 3.5mm, 7-16 DIN,
BNC, SMA, TNC, Type N



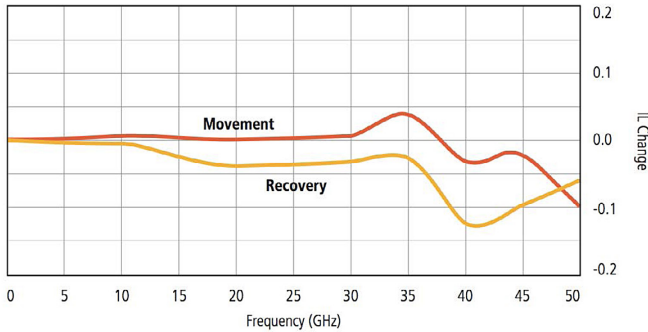
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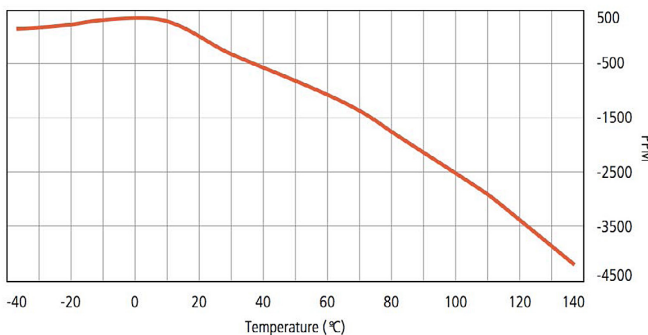
Phase Change vs. Flexure



Insertion Loss vs. Flexure



Phase Change vs. Temperature



Specifications

Frequency		Part No.	Attenuation		Conn. Loss dB	VSWR	
GHz	Band		dB/ft	dB/m			
0.3	UHF	SL4	0.062	0.203	0.006	1.10	
0.5			0.082	0.268	0.009		
0.8			0.106	0.348	0.012		
1.0	L		0.120	0.394	0.014		
2.0	S		0.178	0.585	0.024	1.15	
2.4			0.199	0.652	0.027		
3.0			0.227	0.744	0.032		
4.0	C		0.270	0.885	0.040	1.20	
6.0			0.347	1.138	0.055		
8.0	X		0.417	1.367	0.070	1.25	
10.0		SL18	0.482	1.580	0.084		
12.4			0.555	1.822	0.101		
15.0	Ku		0.631	2.070	0.118		
18.0			0.715	2.345	0.139		
20.0	K	0.769	2.522	0.152	1.30		
22.0		SL26	0.821	2.695		0.165	
24.0			0.873	2.865		0.178	
26.5			0.937	3.073		0.194	
28.0		Ka	0.974	3.196		0.204	1.35
30.0			SL34	1.024		3.358	
32.0	1.072			3.518	0.230		
34.0	1.121			3.676	0.243		
36.0	SL40	1.168	3.833	0.256	1.40		
40.0		1.262	4.141	0.281			
45.0	Q	1.377	4.158	0.313	1.45		
50.0	V	1.490	4.888	0.344	1.50		

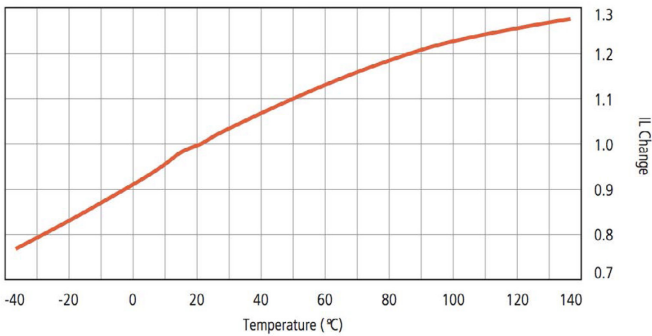
Note: Typical Insertion Loss dB = (Attenuation)(Length) + 2(Conn. Loss)
 Attenuation at any frequency = (0.10506 x √freq GHz) + (0.01494 x freq GHz)



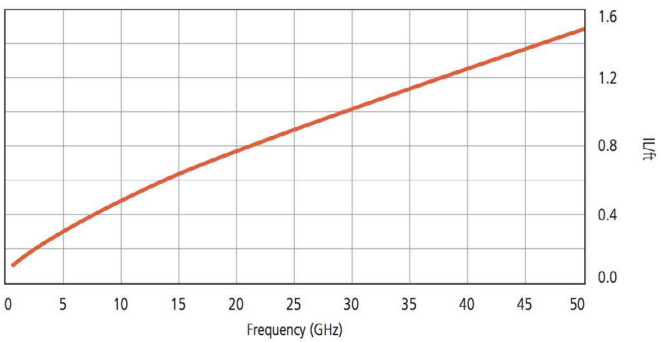
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Insertion Loss vs. Temperature



Insertion Loss



Cable CW Power Handling

