

SiteLine™ Armored Test Cables

Rugged Cables for the Field and Severe Environments

MegaPhase's SiteLine series cable assemblies employ a rugged armored construction and are designed for harsh assembly operations and on-site field testing using portable network analyzers. The cable construction uses our industry leading GrooveTube® technology. These cable assemblies will endure extreme handling conditions and the physical stress associated with cable torquing, and floor crush conditions. These cables offer maximum flexibility and are jacketed with a highly weather resistant outer cover. Applications include rugged production environments, flightline, antenna/base station and outdoor/range. For use with 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



MegaPhase®

Our Customers Connect With Us™

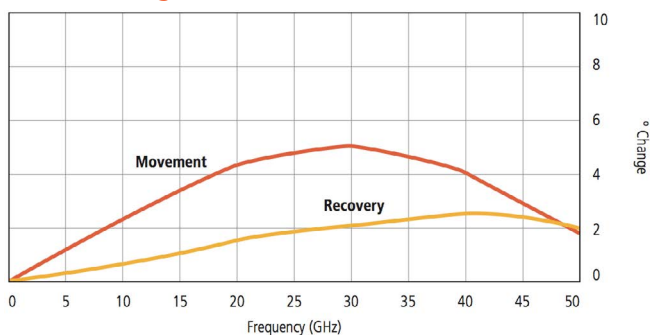
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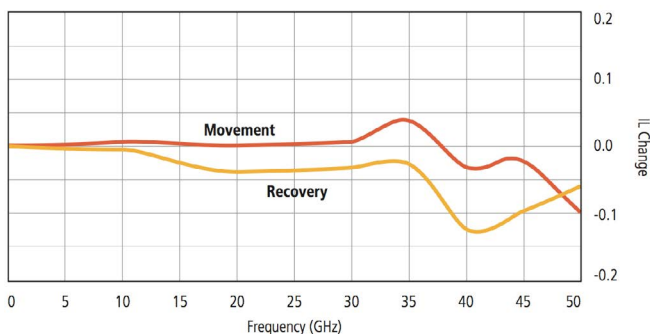
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SiteLine™ Armored Test Cables (cont'd)

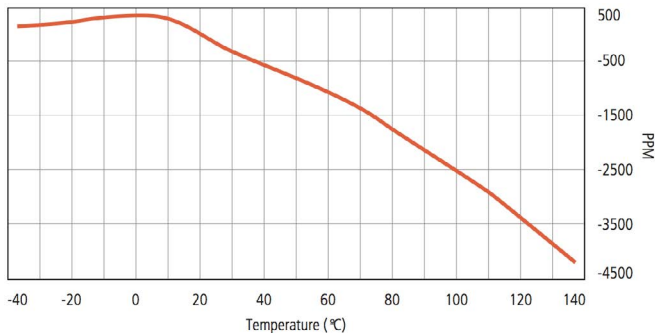
Phase Change vs. Flexure



Insertion Loss vs. Flexure



Phase Change vs. Temperature



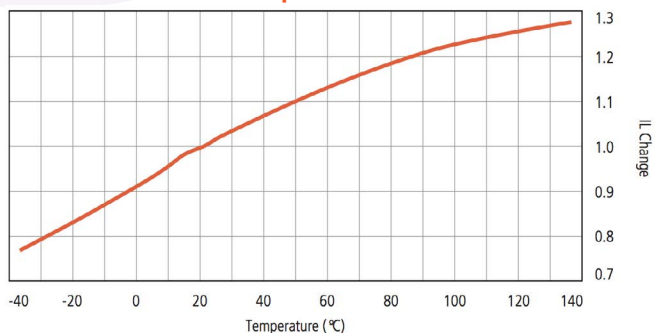
Specifications

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	1.15	
2.0	S		0.178	0.585	0.024		
2.4			0.199	0.652	0.027		
3.0	C		0.227	0.744	0.032	1.20	
4.0			0.270	0.885	0.040		
6.0			0.347	1.138	0.055		
8.0	X	SL8	0.417	1.367	0.070	1.25	
10.0			0.482	1.580	0.084		
12.4	Ku	SL18	0.555	1.822	0.101	1.30	
15.0			0.631	2.070	0.118		
18.0			0.715	2.345	0.139		
20.0	K		SL26	0.769	2.522		0.152
22.0				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	SL34	0.974	3.196	0.204	1.35	
30.0			1.024	3.358	0.217		
32.0			1.072	3.518	0.230		
34.0		SL40	1.121	3.676	0.243	1.40	
36.0			1.168	3.833	0.256		
40.0			1.262	4.141	0.281		
45.0	Q	SL50	1.377	4.158	0.313	1.45	
50.0	V	1.490	4.888	0.344	1.50		

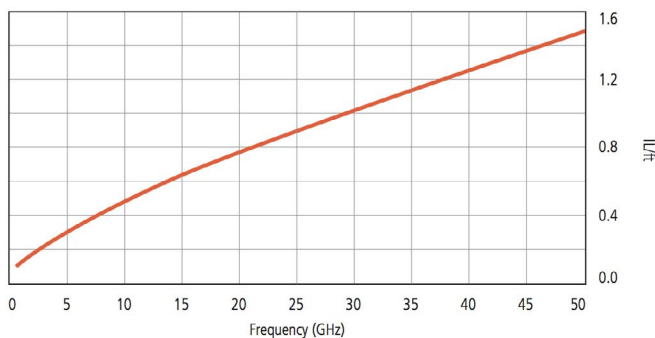
Note: Typical Insertion Loss dB = (Attenuation)(Length) + 2(Conn. Loss) Attenuation at any frequency = (0.10506 x √freq GHz) + (0.01494 x freq GHz)

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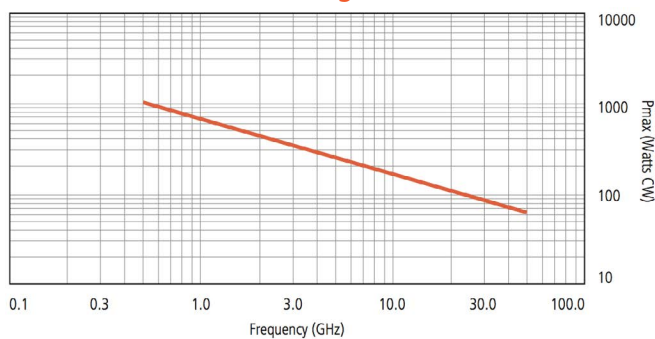
Insertion Loss vs. Temperature



Insertion Loss



Cable CW Power Handling



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.