MegaPhase®

BROADBAND**TEST**

Broadband Test Cables to 8 GHz

75-ohm Cables for Testing of IoT Devices, Cable Modems, CATV, IPTV, and Broadcast Components

- **Light Weight**
- **Rugged Design**
- **Precision Connectors**
- **75-ohms**
- **Excellent VSWR 1.10:1 at 4 GHz**
- **High Performance**

MegaPhase 75-ohm broadband test cables offer are designed for bench-top testing of devices in broadcast, IoT, satellite and cable TV receivers, cable modems, High Definition televisions, AM/FM radio receivers, and police scanners. These test cables are designed to survive in rugged test environments and provide stable performance under flexure enabling repeatable measurements between calibrations. Precision connectors include Type N, F, and BNC.

MADE IN THE USA

Electrical Data

Maximum Frequency:
8 GHz
Impedance:
75 Ω nominal
Propagation Velocity:
84% nominal
Time Delay:
1.21 ns/ft (3.97 ns/m)
Shielding Effectiveness:
-110 dB minimum (cable only)
Dielectric Withstanding Voltage:
3 kV at 60 Hz
Capacitance:
15.8 pF/ft (51.8 pF/m)

Mechanical Data

Finished Outer Diameter:
0.285 in (0.724 cm)
Static Bend Radius:
1.5 in (3.81 cm)
Weight with Standard Jacket/Armor:
0.06 lbs/ft (0.089 kg/m)
Crush Resistance:
250 lbs/linear in (44.6 kg/linear cm)
Operating Temp. Range:
-67 to 185° F (-55 to 85° C)

Cable Construction

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Inner Conductor:	Solid Cu
Dielectric:	Foamed Polyethylene
Outer Conductor:	GrooveTube® Cu
Standard Finish:	Polyolefin over Sn-plated metallic braid

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

Available Connectors

BNC, F, Type N
(maximum frequency dependent on cable; other connectors available)

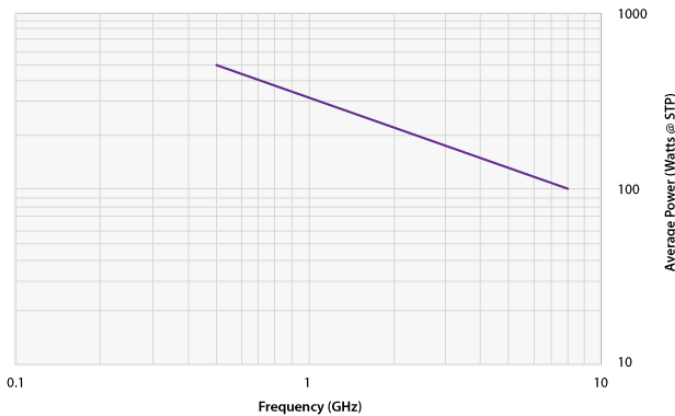# Broadband Test Cables to 8 GHz (continued)

Cable Insertion Loss
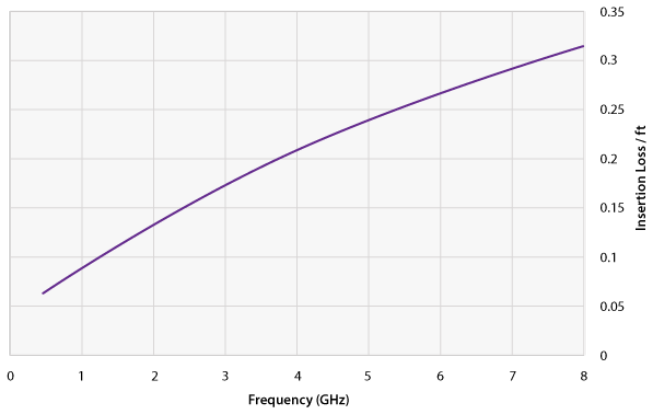
Specifications

Frequency		Attenuation		Conn. Loss dB	VSWR
GHz	Band	dB/ft	dB/m		
0.3	UHF	0.046	0.152	0.006	1.10
0.5		0.061	0.201	0.009	
0.8		0.080	0.261	0.012	
1.0	L	0.090	0.296	0.014	
2.0	S	0.134	0.441	0.024	1.15
2.4		0.150	0.491	0.027	
3.0		0.171	0.562	0.032	
4.0	C	0.204	0.669	0.040	1.20
6.0		0.263	0.862	0.055	
8.0	X	0.316	1.037	0.070	

Note: Typical Insertion Loss dB = (Attenuation)(Length) +2(Conn. Loss)
Attenuation at any frequency = (0.784 x $\sqrt{\text{freq GHz}}$) + (0.0118 x freq GHz)

Cable CW Power Handling

Typical Return Loss Terminated

1:	666.6781 MHz	-36.987 dB
2:	971.2969 MHz	-36.987 dB
3:	2.9988 GHz	-36.987 dB
4:	3.0512 GHz	-36.987 dB
> 5:	8.0000 GHz	-36.987 dB