

With the right connections, anything is possible.

## **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.

## **Electrical Data**

**Maximum Frequency:** 

8 GHz

Impedance: 75  $\Omega$  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**

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

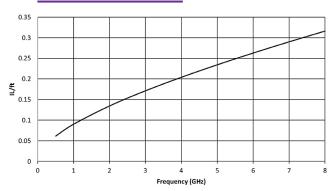
(maximum frequency dependent on cable;

other connectors available)

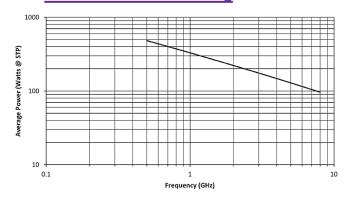


# **Broadband Test Cables to 8 GHz (continued)**

## **Cable Insertion Loss**



# **Cable CW Power Handling**



# **Specifications**

Frequency		Attenuation		Conn.	VSWR
GHz	Band	dB/ft	dB/m	Loss dB	VSVVK
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	С	0.204	0.669	0.040	1.20
6.0		0.263	0.862	0.055	
8.0	Х	0.316	1.037	0.070	

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

# **Typical Return Loss Terminated with N Male Connectors**

