

“Improved” Broadband Test Series Cable



75 ohm Cables for CATV, Video, IPTV and Broadcast Components

MegaPhase 75-ohm BT test cables offer an ideal alternative to expensive OEM cables employed in bench-top testing of CATV products. These cables feature the same rugged GrooveTube® construction as our “RF Orange” cables which can withstand harsh test environments, and provide stable performance during flexure. The cables utilize Precision 75 ohm connectors, are available in phase matched sets and can be color coded to provide proper interconnections.

Improvements:

- 18% lower insertion loss
- 40% higher power capability

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

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)

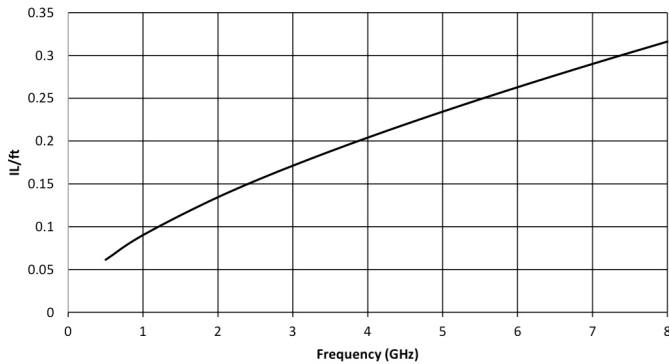
Available Connectors

BNC, F, Type N

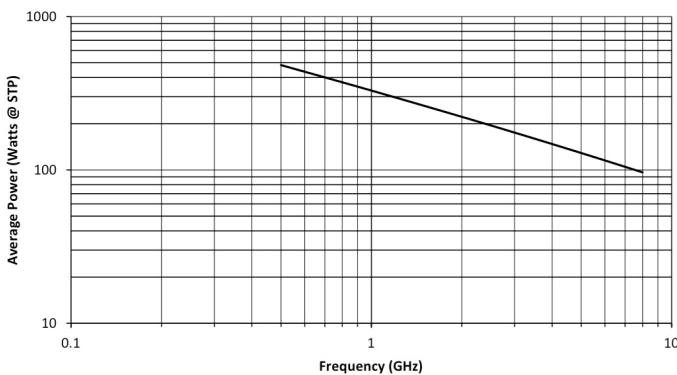
(maximum frequency dependent on cable; other connectors available)

"Improved" Broadband Test Series Cable (cont'd)

Cable 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.

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	1.15
2.0	S	0.134	0.441	0.024	
2.4		0.150	0.491	0.027	
3.0		0.171	0.562	0.032	1.20
4.0	C	0.204	0.669	0.040	
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 = $(0.784 \times \sqrt{\text{freq GHz}}) + (0.0118 \times \text{freq GHz})$

Typical Return Loss terminated with N Male Connectors

