

Low Loss – High Performance Coax

Features & Benefits

- Lower Loss than RG/SF Versions
- Superior Shielding Effectiveness
- Low Passive Intermod (-155 dBc)
- Stable Loss & VSWR vs Flexing
- Excellent Connector Selection



TCOM cables provide the ultimate performance in a flexible cable. The high velocity gas injected foam polyethylene dielectric provides the lowest dielectric loss of any practical dielectric and silver plated flat ribbon braid make TCOM the ideal choice for uhf/microwave applications and all other commercial and military interconnect systems.

The TCOM design make them the ideal choice for jumper cables in commercial wireless (PCS, Cellular, Paging, LMR) and military systems.

The Shielding system, pioneered by Times Microwave Systems in the mid-sixties, consists of an inner silver plated flat ribbon braid (FSC), a spirally applied and overlapped composite aluminum tape interlayer (Intl), and an overall tin plated round wire braid (TC). The flat ribbon shield affords approximately 15% lower loss and >95 dB shielding when compared with the typical M17/RG round wire braided shield (40 to 60 dB).

Standard M17/RG cables are shielded with high cov-

erage single or double round wire braids. While these shields provide 40 dB and 60 dB shielding effectiveness respectively, they are not particularly stable (loss & vswr) nor is the shielding adequate for today's sensitive wireless communications and microwave military/defense applications.

VSWR is lower since the flat ribbons can be applied over the dielectric much more uniformly than multi-end round wire braids. The VSWR and attenuation variation due to aging and flexure is substantially lower at all frequencies, and especially above 12 GHz. TCOM cables are also available from Times that have been sweep tested for broadband VSWR and attenuation performance. Please contact the factory with your specific requirements.

A full range of standard interface connectors (crimp or clamp style) are available. TCOM cables can be purchased in bulk reels or as preterminated and tested cable assemblies.

TCOM Low Loss High Performance Coaxial Cables

TMS Number	Conductor inches (mm)	Dielectric inches (mm)	Shields inches (mm)	Jacket inches (mm)	Weight lbs/foot (kg/m)	Impedance ohms Vp(%)	Capacitance pF/foot (pF/m)	DC Resistance ohms/1kft (/km)		Oper. Voltage kvrms	Temp. Range F (C)	Min. Bend Radius in. (mm)	Test Freq. GHz
								Cent. Cond	Shield (s)				
TCOM-200	BC	Foam PE	FSC	PE+lvs	0.040	50 +/- 1	24.5	5.4	3.54	1.0	-40 +185	0.5	.03-10
	0.044 (1.12)	0.116 (2.95)	Intl: TC 0.154 (3.91)	0.195 (4.95)	(0.060)	83	(80.4)	(17.6)	(10.7)		(-40 +85)	(12.7)	GHz
TCOM-240	BC	Foam PE	FSC	PE+lvs	0.045	50 +/- 1	24.2	3.2	1.91	1.5	-40 +185	1	.03-10
	0.058 (1.42)	0.150 (3.81)	Intl: TC 0.188(4.78)	0.240 (6.10)	(0.067)	84	(79.4)	(10.5)	(6.26)		(-40 +85)	(25.4)	GHz
TCOM-300	BC	Foam PE	FSC	PE+ lvs	0.055	50+/-1	23.9	2.1	1.96	2.0	-40+185	1.5	.03-10
	0.070 (1.78)	0.190 (4.83)	Intl: TC 0.225 (5.72)	0.300 (7.62)	(0.082)	85	(78.4)	(7.0)	(5.4)		(-40+85)	(38.1)	GHz
TCOM-400	BCCAI	Foam PE	FSC	PE+lvs	0.080	50+/-1	23.9	1.4	1.37	2.5	-40+185	2	.03-10
	0.108 (2.74)	0.285 (9.40)	Intl: TC 0.330 (8.38)	0.405 (10.29)	(0.119)	85	(78)	(4.6)	(3.8)		(-40+85)	(50.8)	GHz
TCOM-500	BCCAI	Foam PE	FSC	PE+lvs	0.120	50+/-1	23.6	0.81	1.21	3.0	-40+185	2.5	03-10
	0.142 (3.61)	0.370 (9.40)	Intl: TC 0.415 (10.54)	0.500 (12.70)	(0.179)	86	(77.4)	(2.7)	(4.3)		(-40+85)	(63.5)	GHz
TCOM-600	BCCAI	Foam PE	FSC	PE+lvs	0.160	50+/-1	23.4	0.524	1.02	4.0	-40+185	3	.03-10
	0.176 (4.47)	0.455 (11.56)	Intl: TC 0.500 (12.70)	0.590 (14.99)	(0.238)	87	(76.8)	(1.7)	(3.7)		(-40+85)	(76.2)	GHz