

C50SMNM.2

Test Cable



50 Ω 2 ft. DC to 18 GHz
SMA-Male/N-Male Connectors

Features

- ▶ RoHS Compliant
- ▶ Wideband coverage, DC to 18 GHz
- ▶ Extra rugged construction with strain relief for longer life
- ▶ Stainless steel N-Male connectors for long mating-cycle life
- ▶ Useful over temperature range of -55°C to 105°C
- ▶ Triple shield cable for excellent shielding effectiveness
- ▶ Flexible for easy connection and bend radius
- ▶ Superior stability of insertion loss, VSWR and phase vs. flexing

Maximum Ratings

Operating temperature -55°C to 105°C

Storage temperature -55°C to 105°C

Permanent damage may occur if any of these limits are exceeded.

Shielding Effectiveness > 100 dB

Jacket Clear FEP

Power handling at 25°C

891W Max. at 0.4 GHz

539W Max. at 1 GHz

363W Max. at 2 GHz

180W Max. at 6 GHz

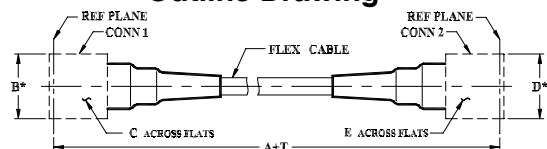
117W Max. at 12 GHz

88W Max. at 18 GHz

Applications

- ▶ High volume production
- ▶ Research and development
- ▶ Environmental and temperature test chambers
- ▶ Replacement for OEM test port cables
- ▶ RF testing in the field
- ▶ Cellular infrastructure site testing

Outline Drawing

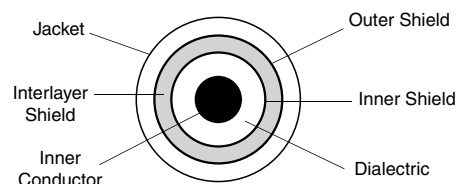


*OVERALL CONNECTOR OR CABLE & BOOT DIMENSION
(CONNECTOR SHAPE MAY VARY)

Outline Dimensions (inch/mm)

A	B	C	D	E	T	wt		
Feet	Meters				Feet	Meters	grams	
2	0.61	0.42	0.312	0.88	.750	0.06	0.02	95
		10.67	7.92	22.35	19.05			

Cable Cross Section

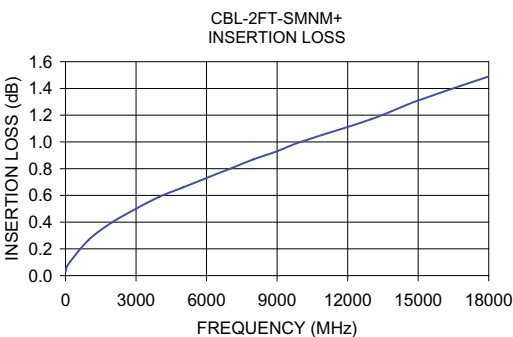
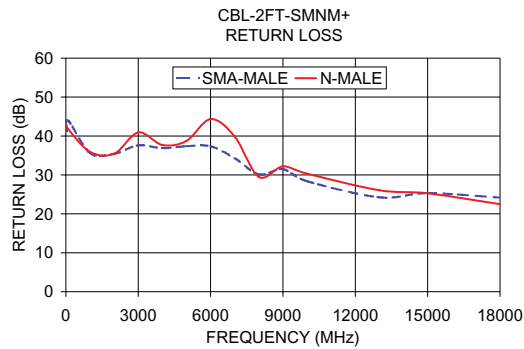


Cable Construction

Inner conductor	Solid silver plated copper clad steel
Dielectric	Solid PTFE
Shield	Silver-plated copper flat ribbon braid
	Aluminum-polyimide tape interlayer 36 GA
	Silver-plated copper braid (90%k)
Jacket	Clear FEP

Connectors

Passivated stainless steel
Captive contact
Thick wall interface (SMA)
Gold plated beryllium copper center contacts
PTFE dielectric



Electrical Specifications at 25°C

FREQ. (GHz)	LENGTH (FT)	INSERTION LOSS (dB)				RETURN LOSS (dB)											
		DC-2.5 GHz	2.5-6 GHz	6-12 GHz	12-18 GHz	DC-2.5 GHz	2.5-6 GHz	6-12 GHz	12-18 GHz								
f_c-f_u		Typ. Max.	Typ. Max.	Typ. Max.	Typ. Max.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.								
DC-18	2	0.4	0.6	0.7	0.95	1.1	1.4	1.4	1.75	30	23	30	20	27	17	27	17

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		SMA-MALE	N-MALE
10.00	0.03	41.25	43.11
100.00	0.08	43.91	41.75
1000.00	0.27	35.66	35.94
2000.00	0.40	35.45	35.43
3000.00	0.50	37.62	40.92
4000.00	0.59	36.87	37.69
5000.00	0.66	37.38	38.73
6000.00	0.73	37.36	44.35
7000.00	0.80	34.33	39.88
8000.00	0.87	30.15	29.50
9000.00	0.93	31.51	32.22
10000.00	1.00	28.39	30.32
13000.00	1.17	24.26	26.06
15000.00	1.31	25.34	25.28
18000.00	1.49	24.18	22.50



COPPER MOUNTAIN TECHNOLOGIES

US Office: +1.317.222.5400 | Singapore Office: +65.63.23.6546

coppermountaintech.com