

Test Cable

50Ω 1M DC to 18 GHz

CBL-1M-SMSM+



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
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	
Jacket	Clear FEP

Features

- RoHS compliant
- wideband coverage, DC to 18 GHz
- extra rugged construction with strain relief for longer life
- stainless steel SMA connectors for long mating-cycle life
- useful over temperature range, -55°C to 105°C
- triple shield cable for excellent shielding effectiveness
- flexible for easy connection & bend radius
- superior stability of insertion loss, VSWR & phase vs. flexing
- 6 month guarantee*

Applications

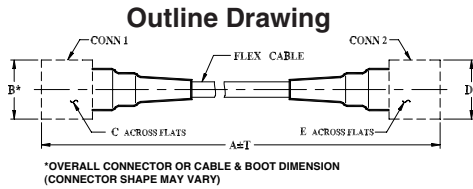
- high volume production test stations
- research & development labs
- environmental & temperature test chambers
- replacement for OEM test port cables
- field RF testing
- cellular infrastructure site testing

CASE STYLE: GM1006-3.28

Connectors	Model	Price	Qty.
Conn1 SMA-MALE	Conn2 SMA-MALE	CBL-1M-SMSM+	\$73.95 ea. (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.



Outline Dimensions (inch/mm)

A	B	C	D	E	T	wt		
Feet	Meters				Feet	Meters	grams	
3.28	1.00	0.42	0.312	0.42	0.312	0.1	0.03	92

Electrical Specifications at 25°C

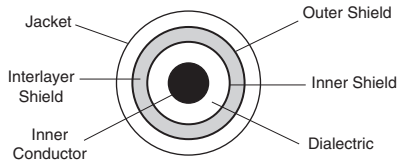
FREQ. (GHz)	LENGTH (M)	INSERTION LOSS (dB)				RETURN LOSS (dB)											
		DC-2.5 GHz		2.5-6 GHz		6-12 GHz		12-18 GHz									
		Typ. Max.	Typ. Max.	Typ. Max.	Typ. Max.	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Min.								
f _L -f _U																	
DC-18	1	0.7	0.8	1.1	1.4	1.6	2.1	2.0	2.6	30	23	30	20	27	17	27	17

Custom sizes available, consult factory.

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		SMA-MALE	SMA-MALE
0.30	0.00	55.69	59.07
100.00	0.12	45.16	44.94
1000.00	0.41	44.44	44.78
2000.00	0.59	37.01	34.29
2500.00	0.67	36.60	33.40
3000.00	0.74	36.22	35.43
4000.00	0.87	45.15	54.80
5000.00	0.99	33.47	32.11
6000.00	1.10	36.12	33.68
8000.00	1.31	30.12	28.65
10000.00	1.51	28.54	28.47
12000.00	1.68	26.11	25.72
14000.00	1.82	29.84	28.46
16000.00	1.99	28.23	25.40
18000.00	2.09	38.61	33.21

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	
<ul style="list-style-type: none"> • passivated stainless steel • captive contact • thick wall interface (SMA) • gold plated beryllium copper center contacts • PTFE dielectric 	

Product Guarantee*

Mini-Circuits® will repair or replace your test cable at its option if the connector attachment fails within six months of shipment. This guarantee excludes cable or connector interface damage from misuse or abuse.

