



Mini-Circuits®



Test Cable

CBL-1M-SMSM+

50Ω 1M DC to 18 GHz SMA-Male

FEATURES

- 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*

*Generic photo used for illustration purposes only*

Model No.	CBL-1M-SMSM+
Case Style	GM1006-3.28
Connectors	SMA-Male

+RoHS Compliant

The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

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

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency range		DC		18	GHz
Length ¹		1			M
Insertion Loss	DC - 2.5	—	0.7	0.8	dB
	2.5 - 6	—	1.1	1.4	
	6 - 12	—	1.6	2.1	
	12 - 18	—	2.0	2.6	
Return Loss	DC - 2.5	23	30	—	dB
	2.5 - 6	20	30	—	
	6 - 12	17	27	—	
	12 - 18	17	27	—	

1. Custom sizes available, consult factory.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to +105°C
Storage Temperature	-55°C to +105°C
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

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.





Mini-Circuits

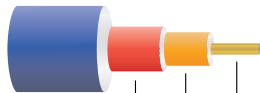


Test Cable

CBL-1M-SMSM+

50Ω 1M DC to 18 GHz SMA-Male

CABLE CONSTRUCTION

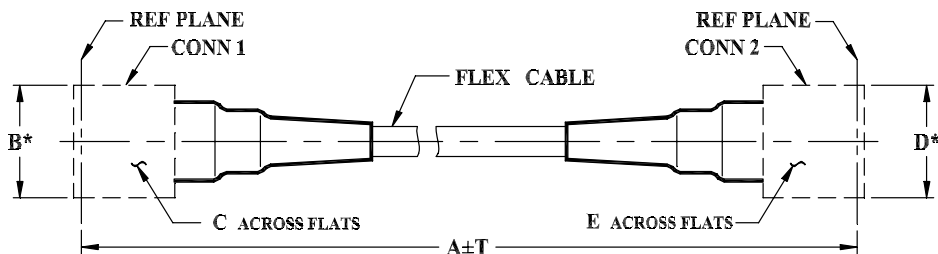


- Inner Conductor: Solid Silver Plated Copper Clad Steel
- Dielectric: Solid PTFE
- Shield: Silver-Plated Copper Flat Ribbon Braid
Aluminum-Polyimide Tape Interlayer 36 GA
Silver-Plated Copper Braid (90%k)
- Jacket: Blue FEP

Connectors:

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

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
3.28	1.00	0.42	0.312	0.42	0.312	0.1	0.03	92





Mini-Circuits



Test Cable

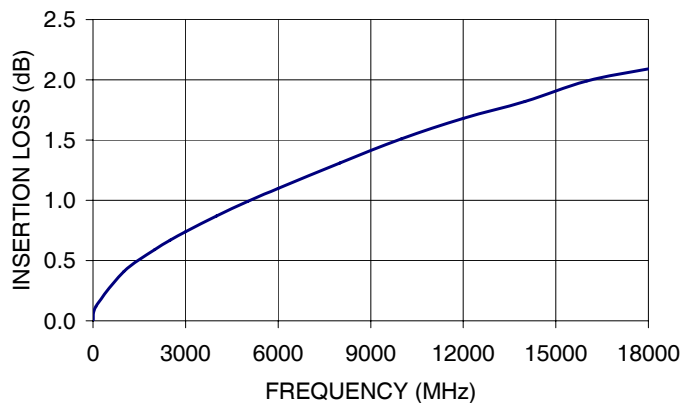
CBL-1M-SMSM+

50Ω 1M DC to 18 GHz SMA-Male

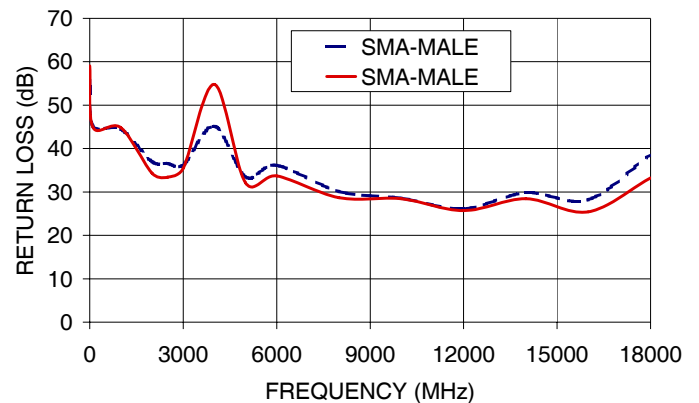
TYPICAL PERFORMANCE DATA

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

CBL-1M-SMSM+
INSERTION



CBL-1M-SMSM+
RETURN LOSS



NOTES

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard. Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[CBL-1M-SMSM+](#)