FLEX TEST™

Test Cable

CBL-3FT-SFNM+

50Ω 3FT DC to 18 GHz SMA Female to N-Type Male

FEATURES

- Wideband Coverage, DC to 18 GHz
- Extra Rugged Construction with Strain Relief for Longer Life
- Stainless Steel 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-3FT-SFNM+
Case Style	GM1132-3
Connectors	SMA Female to N-Type 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[1] AT 25 °C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Length[1]			3		FT
Insertion Loss	DC - 2.5	—	0.6	0.8	dB
	2.5 - 6	—	1.0	1.35	
	6 - 12	—	1.5	1.95	
	12 - 18	—	1.9	2.45	
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[2]

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	891 W Max. at 0.4 GHz 539 W Max. at 1 GHz 363 W Max. at 2 GHz 180 W Max. at 6 GHz 117 W Max. at 12 GHz 88 W Max. at 18 GHz

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

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.

REV. J
ECO-019325
CBL-3FT-SFNM+
MCL NY
260520

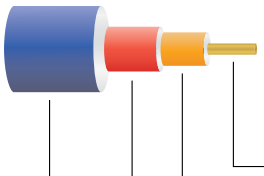
FLEX TEST™

Test Cable

CBL-3FT-SFNM+

50Ω 3FT DC to 18 GHz SMA Female to N-Type Male

CABLE CONSTRUCTION



Inner Conductor: Solid Silver Plated Copper Clad Steel

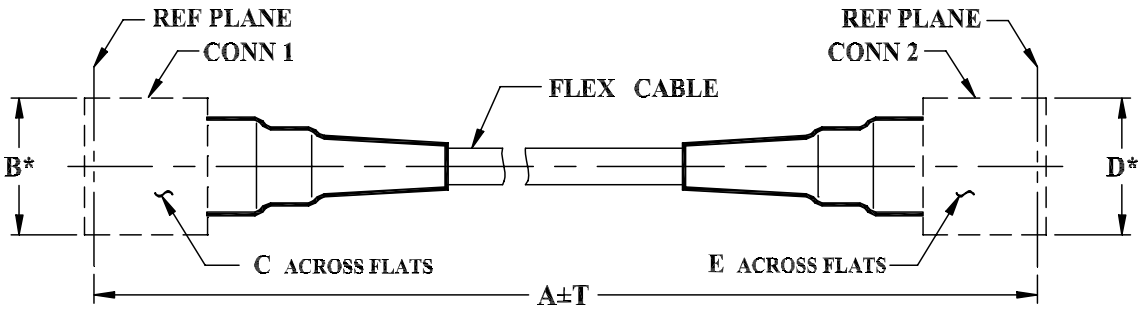
Dielectric: Solid PTFE

Shield: Silver-Plated Copper Flat Ribbon Braid
Aluminum-Polymide Tape Interlayer 36 GA
Silver-Plated Copper Braid (90%k)

Jacket: Blue FEP

Connectors:
- Passivated stainless steel
- Captive contact
- Thick wall interface
- 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	.51	-	.88	.750	Feet	Meters	grams
3	0.91	12.95	-	22.35	19.05	0.09	0.03	118

FLEX TEST™

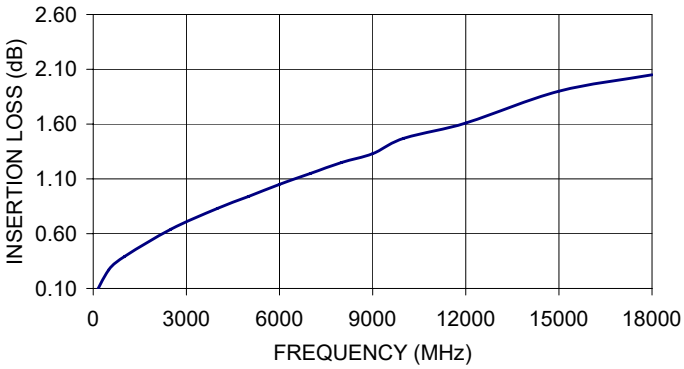
Test Cable

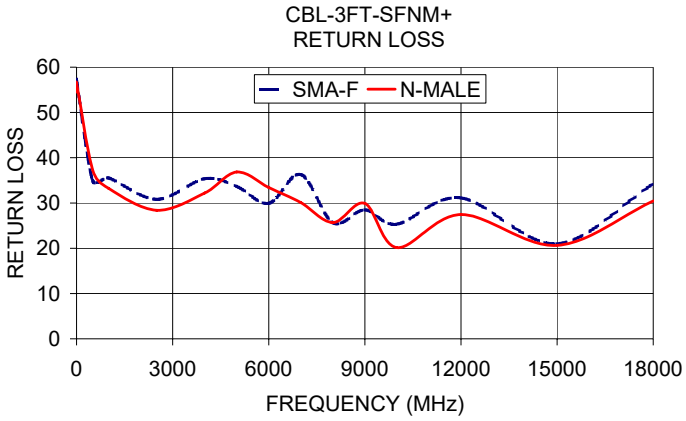
CBL-3FT-SFNM+

50Ω 3FT DC to 18 GHz SMA Female to N-Type Male

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		SMA Female	N- Type Male
1.0	0.01	57.17	56.55
500	0.27	34.97	37.32
1000	0.39	35.55	33.24
2500	0.64	30.82	28.38
4000	0.83	35.37	32.20
5000	0.94	33.66	36.85
6000	1.05	29.94	33.42
7000	1.15	36.29	30.09
8000	1.25	25.64	25.68
9000	1.33	28.50	29.91
10000	1.47	25.34	20.15
12000	1.61	31.12	27.46
15000	1.90	21.00	20.63
18000	2.05	34.23	30.44





NOTES

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
C. 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/terms/viewterm.html

Test Cable, SMA-Female/N-Male CBL-3FT-SFNM+

Typical Performance Data

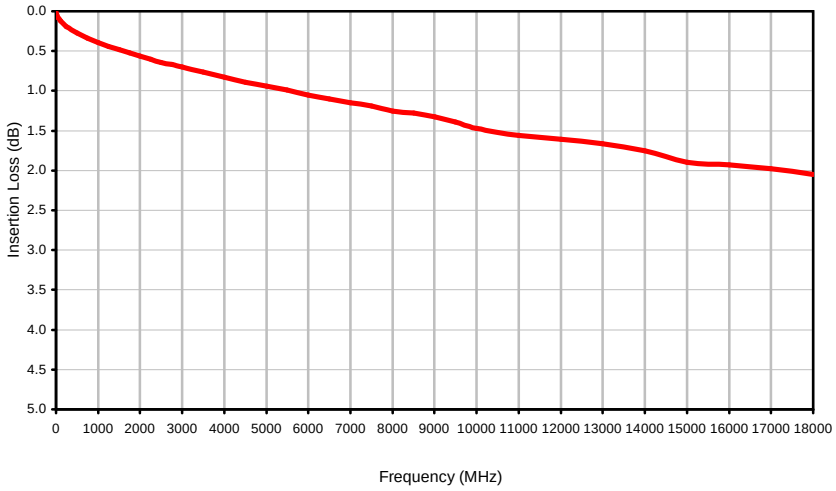
FREQUENCY (MHz)	INSERTION LOSS (dB)	SMA-FEMALE RETURN LOSS (dB)	N-MALE RETURN LOSS (dB)
0.3	0.01	54.51	55.32
1	0.01	56.55	57.17
10	0.04	45.21	45.96
50	0.08	42.96	42.78
100	0.12	45.82	48.67
250	0.19	39.82	39.37
500	0.27	37.32	34.97
750	0.34	36.57	35.41
1000	0.39	33.24	35.55
1250	0.44	34.02	39.77
1500	0.48	39.85	49.93
1750	0.52	42.90	40.09
2000	0.56	33.33	35.12
2250	0.60	28.68	30.94
2500	0.64	28.38	30.82
2750	0.67	29.43	31.02
3000	0.70	32.07	32.45
3500	0.76	37.10	42.05
4000	0.83	32.20	35.37
4500	0.89	28.96	31.16
5000	0.94	36.85	33.66
5500	0.99	33.79	40.94
6000	1.05	33.42	29.94
6500	1.10	24.54	29.23
7000	1.15	30.09	36.29
7500	1.19	26.59	31.10
8000	1.25	25.68	25.64
8500	1.28	32.37	33.52
9000	1.33	29.91	28.50
9500	1.39	24.80	22.78
10000	1.47	20.15	25.34
11000	1.56	20.46	25.82
12000	1.61	27.46	31.12
13000	1.66	39.17	30.62
14000	1.75	29.22	24.04
15000	1.90	20.63	21.00
16000	1.93	25.27	21.54
17000	1.98	24.28	20.95
18000	2.05	30.44	34.23

Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see minicircuits.com

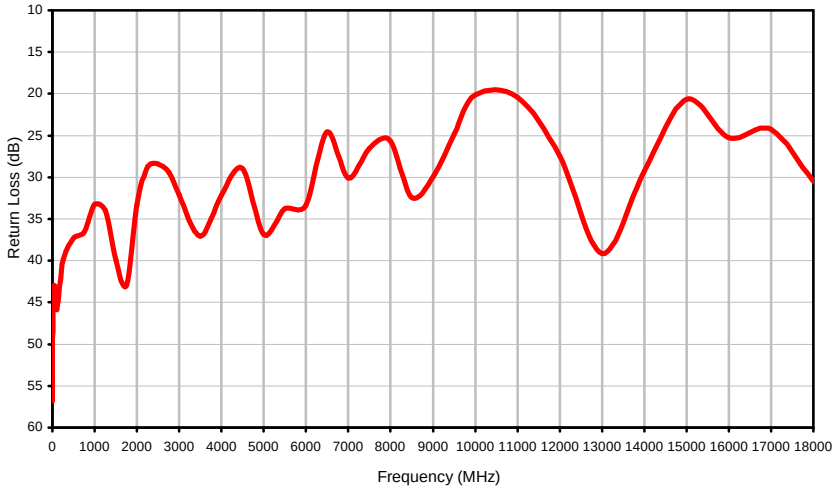
Test Cable, SMA-Female/N-Male CBL-3FT-SFNM+

Typical Performance Curves

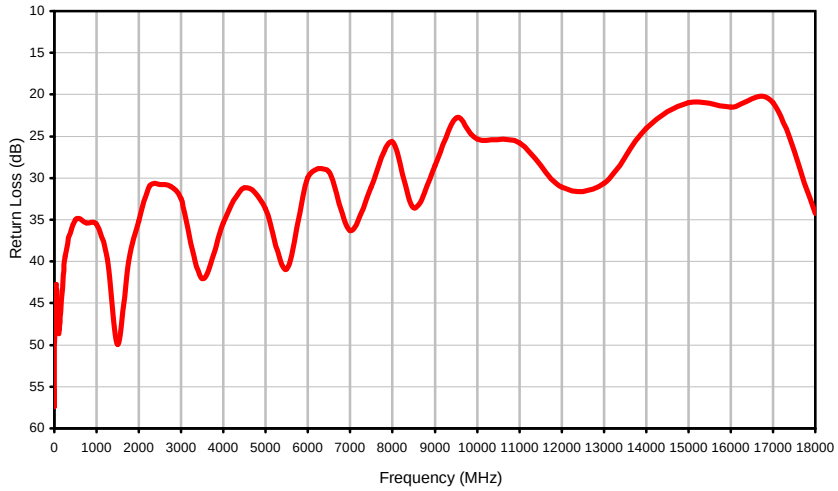
Insertion Loss



SMA-Female Return Loss



N-Male Return Loss

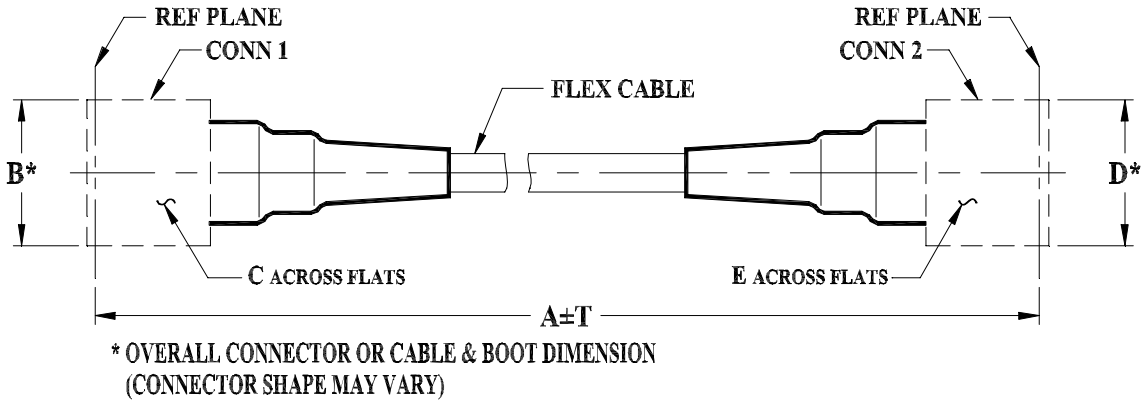


Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see minicircuits.com

Case Style GM

GM1132

Outline Dimensions



GM1132 SERIES

SMA FEMALE (CONN-1)
N MALE (CONN-2)

CASE STYLE #	A		B	C	D	E	T		WEIGHT GRAMS
	FEET	METERS					FEET	METERS	
GM1132-1	1	.30	.51 (12.95)	--	.88 (22.35)	.750 (19.05)	.06	.02	79
GM1132-2	2	.61					.06	.02	98
GM1132-3	3	.91					.09	.03	118
GM1132-4	4	1.22					.12	.04	137
GM1132-5	5	1.52					.15	.05	157
GM1132-6	6	1.83					.18	.05	176

Unless otherwise specified dimensions are in inches (mm).
Tolerances: 2Pl. ± .03; 3Pl. ± .015

Note:
1. Flexible Coaxial Cable.

Mini-Circuits®
INTERNET http://www.minicircuits.com
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010
Mini-Circuits ISO 9001 & ISO 14001 Certified

This document and its contents are the property of Mini-Circuits.

Mini-Circuits

Environmental Specifications ENV34

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 105°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 105°C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 105°C, 100 cycles	MIL-STD-202, Method 107, Condition A-3, except -105°C
Mechanical Flexing	20,000 cycles During each cycle, cable flexed from 90° through 0° to -90° and back with a Radii of 3 inches	- - -

This document and its contents are the property of Mini-Circuits.