

DC Block SMA

BLK-89+

50Ω 0.1 MHz to 8 GHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Input Voltage	50V Max.

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

Features

- broadband performance
- low insertion loss
- rugged unibody construction
- off-the-shelf availability

Applications

- test and measurement instrumentation
- communication systems
- defense systems



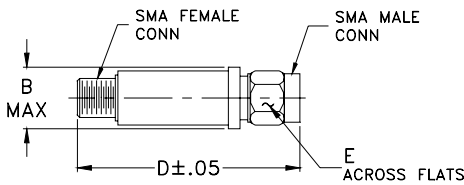
CASE STYLE: FF888

SMA Connectors	Model
Female-Male	BLK-89-S+

+RoHS Compliant

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

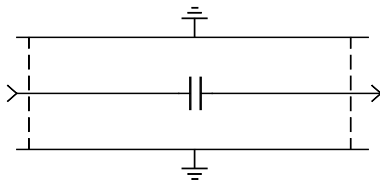
Outline Drawing



Outline Dimensions (inch/mm)

B	D	E	wt
.410	1.18	.312	grams
10.41	29.97	7.92	7.0

Electrical Schematic

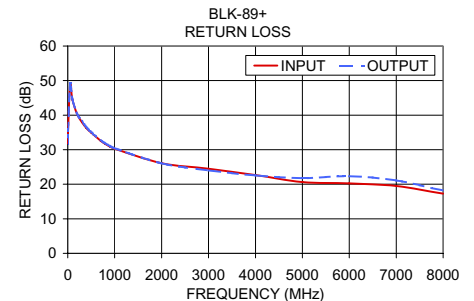
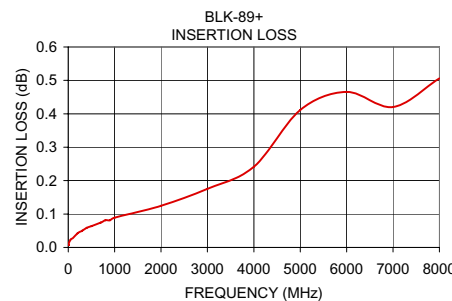


Electrical Specifications at 25°C

FREQUENCY (MHz)	INSERTION LOSS (dB)		RETURN LOSS (dB)	
	Typ.	Max.	Typ.	Min.
0.1 - 100	0.010	0.09	40	20
100 - 1000	0.10	0.3	36	25
1000 - 4000	0.15	0.8	24	18
4000 - 8000	0.5	0.9	20	13

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		Male	Female
0.3	0.01	31.86	31.89
0.6	0.01	32.19	32.23
0.9	0.01	32.52	32.58
1.0	0.01	32.63	32.69
50.0	0.02	48.75	48.76
100.0	0.03	44.40	44.44
200.0	0.04	40.26	40.33
300.0	0.05	37.96	38.27
400.0	0.06	36.24	36.45
500.0	0.06	34.94	35.08
700.0	0.07	32.57	32.78
800.0	0.08	31.67	31.84
900.0	0.08	30.86	31.04
1000.0	0.09	30.27	30.41
2000.0	0.12	26.09	26.06
3000.0	0.18	24.48	24.04
4000.0	0.24	22.65	22.58
5000.0	0.41	20.64	21.77
6000.0	0.47	20.26	22.30
7000.0	0.42	19.52	21.11
8000.0	0.51	17.29	18.16



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/MCLStore/terms.jsp

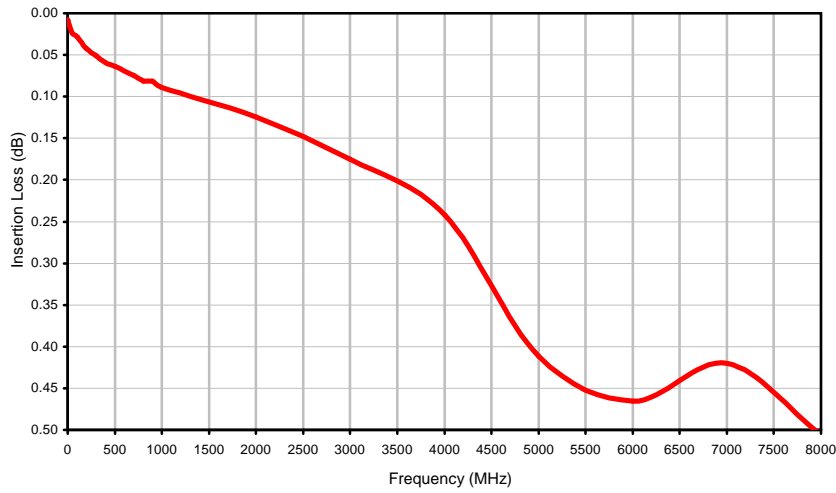


Typical Performance Data

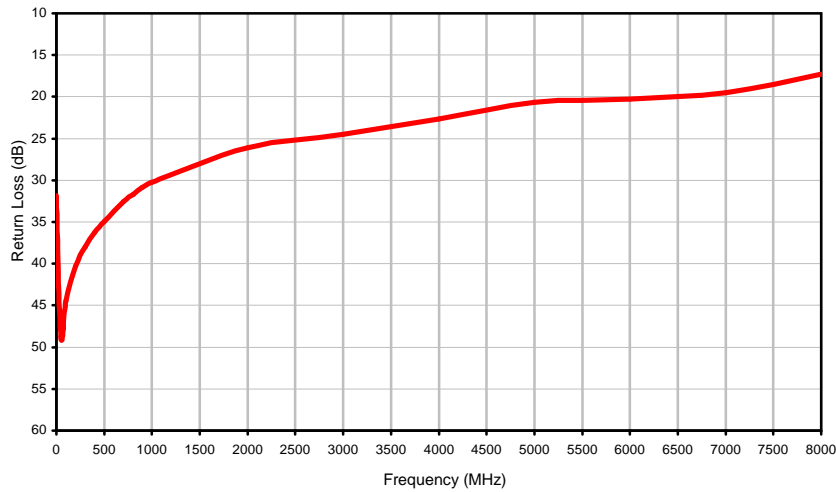
FREQUENCY (MHz)	INSERTION LOSS (dB)	MALE RETURN LOSS (dB)	FEMALE RETURN LOSS (dB)
0.3	0.01	31.86	31.89
0.6	0.01	32.19	32.23
0.9	0.01	32.52	32.58
1	0.01	32.63	32.69
50	0.02	48.75	48.76
100	0.03	44.40	44.44
200	0.04	40.26	40.33
300	0.05	37.96	38.27
400	0.06	36.24	36.45
500	0.06	34.94	35.08
700	0.07	32.57	32.78
800	0.08	31.67	31.84
900	0.08	30.86	31.04
1000	0.09	30.27	30.41
2000	0.12	26.09	26.06
3000	0.18	24.48	24.04
4000	0.24	22.65	22.58
5000	0.41	20.64	21.77
6000	0.47	20.26	22.30
7000	0.42	19.52	21.11
8000	0.51	17.29	18.16

Typical Performance Curves

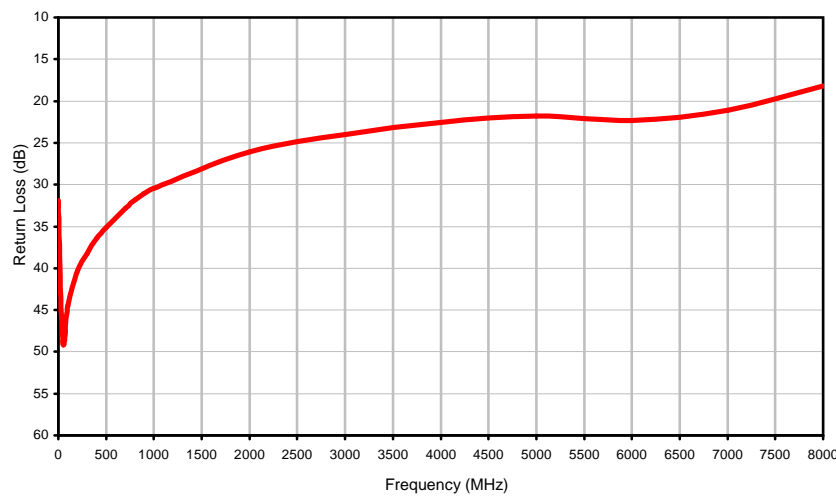
Insertion Loss



Male Return Loss



Female Return Loss



REV. X1
BLK-89-S+
061115
Page 1 of 1



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

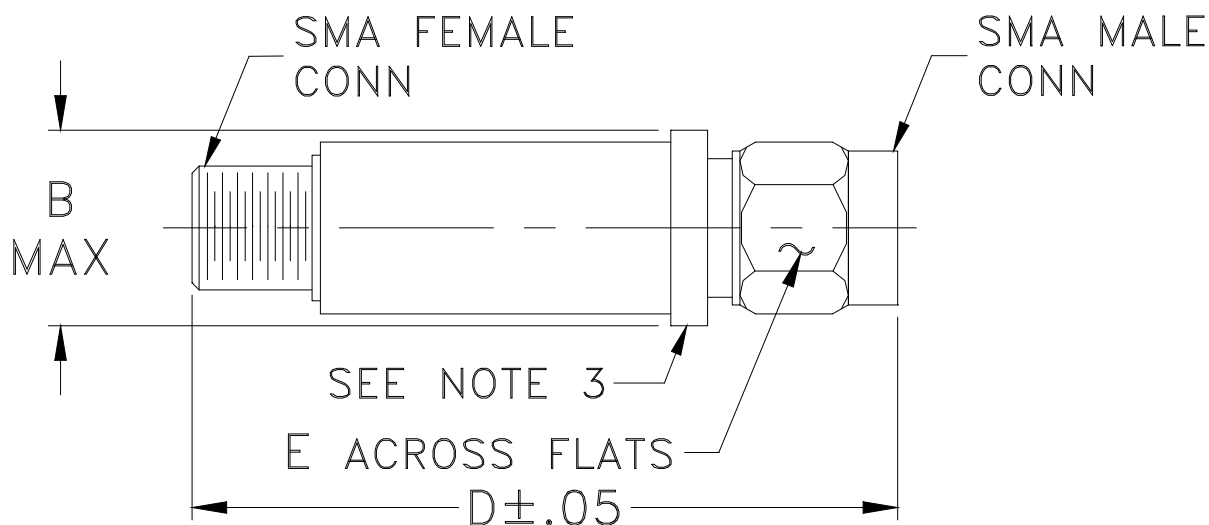


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FF704
FF886
FF887
FF888
FF969
FF1118
FF1145

Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF704		.410 (10.41)		1.43 (36.32)		10.0
FF886		.62 (15.75)		1.90 (48.26)		22.0
FF887		.62 (15.75)		2.24 (56.90)		26.0
FF888	--	.410 (10.41)	--	1.18 (29.97)	.312 (7.92)	7.0
FF969		.555 (14.10)		1.75 (44.45)		20.0
FF1118		.410 (10.41)		2.67 (67.82)		17.0
FF1145		.410 (10.41)		1.91 (48.51)		11.8

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Notes:

1. Case material: Stainless steel.
2. Case finish: Passivation for FF888, gold plate on all remaining case style.
3. Round Flange may have .312 Across Flats in some models.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS



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 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I