COAXIAL

Termination

ROSE-50+

50Ω DC to 6000 MHz SMB-Female

FEATURES

- SMB Connector with female center contact
- Wideband, DC to 6000 MHz
- Rugged Construction

Generic photo used for illustration purposes only

Model No.	ROSE-50+
Case Style	LL604
Connectors	SMB-Female

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

APPLICATIONS

- Cellular Communications
- Test Setup
- Instrumentation
- PCS

ELECTRICAL SPECIFICATIONS

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		6000	MHz
Impedance			50		Ohms
Return Loss	DC - 2000	30	—	—	dB
	DC - 4000	23	—	—	
	DC - 6000	20	—	—	
Power Rating[1]	DC - 6000	—	—	0.50	W

1. At +70°C, derate linearly at 0.005 W/°C to .35 W at +100°C.

ABSOLUTE MAXIMUM RATINGS[1]

Parameter	Ratings
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C

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

REV. G
ECO-016503
ROSE-50+
MCL NY
250407

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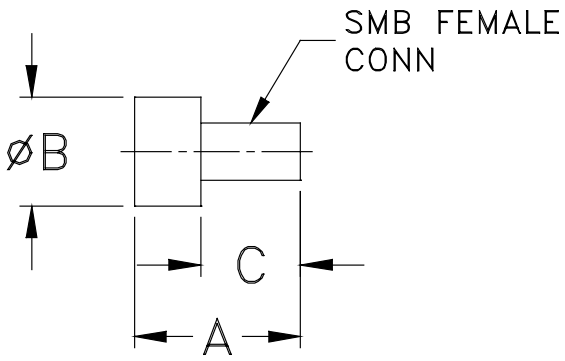
OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch / mm)

A	B	D	wt
0.55	0.36	0.33	grams
13.97	9.14	8.38	4.0

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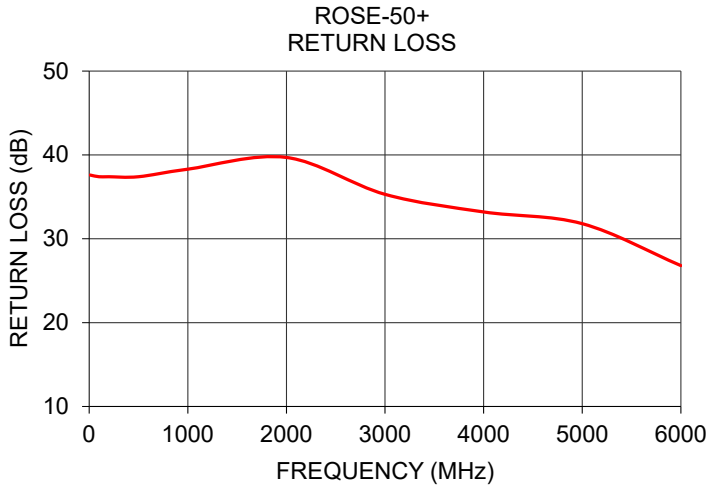
TYPICAL PERFORMANCE DATA

Frequency (MHz)	Return Loss (dB)
10	37.6
100	37.4
200	37.4
500	37.4
1000	38.3
2000	39.7
3000	35.3
4000	33.2
5000	31.8
6000	26.8



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-Circuit's 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

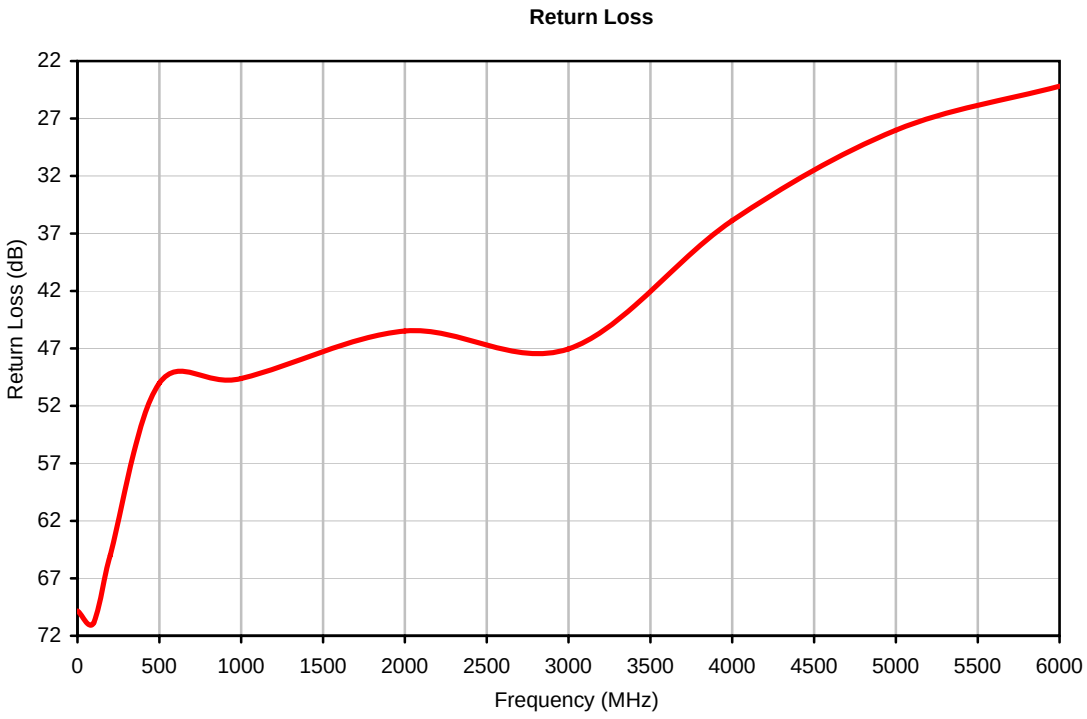
Termination 50 Ω , SMB

ROSE-50+

Typical Performance Data

FREQUENCY (MHz)	RETURN LOSS (dB)
1	69.84
100	70.87
200	65.00
500	50.04
1000	49.61
2000	45.48
3000	47.04
4000	35.88
5000	28.01
6000	24.18

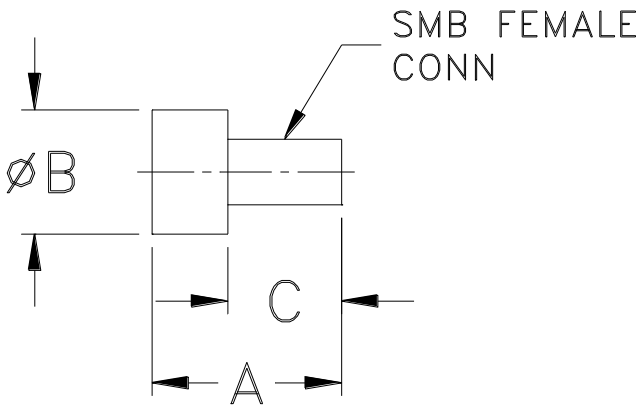
Typical Performance Curves



Case Style LL

Outline Dimensions

LL604



CASE #.	A	B	C	WT GRAMS
LL604	.55 (13.97)	.36 (9.14)	.33 (8.38)	4.0

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

Notes:

1. Case Material: Brass.
2. Case Finish: Gold plate.

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Mini-Circuits

Environmental Specifications ENV28

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

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