

Available as:

TN7917, 4 Pin 0.450" Sq. Surface Mount (SM3)
BX7917, Laser Sealed SMA Connectorized Housing, H1L

RF/Microwave Amplifier



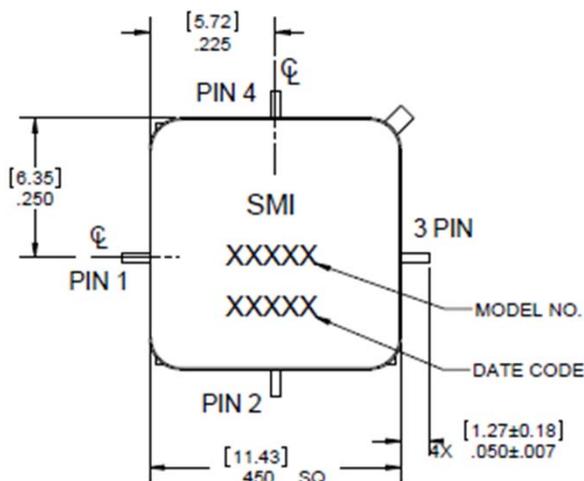
Features

- Low Noise Figure: 1.5 dB
- Wide 100 MHz to 500 MHz Bandwidth
- Environmental Screening Available
- Unconditionally Stable

Technical Specifications

Characteristic		TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency		100 MHz to 500 MHz	100 MHz to 500 MHz
Gain (dB)		29.5	27 Min.
Power @ 1 dB Comp. (dBm)		19.5	17.5 Min.
Reverse Isolation (dB)		45	---
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB)		1.5	2.5 Max.
Power	Vdc	+5	+5
	mA	185	195 Max.

- 1) Care should always be taken to effectively ground the case of each unit
- 2) Typical values are measured at 25°C, but not guaranteed.
- 3) Package drawings below are for reference only.



Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+ 60 dBm (Typ.)
Second Order Two Tone Intercept Point:	+ 54dBm (Typ.)
Third Order Two Tone Intercept Point:	+ 32 dBm (Typ.)

Note: Measured at 250 MHz at 25C.

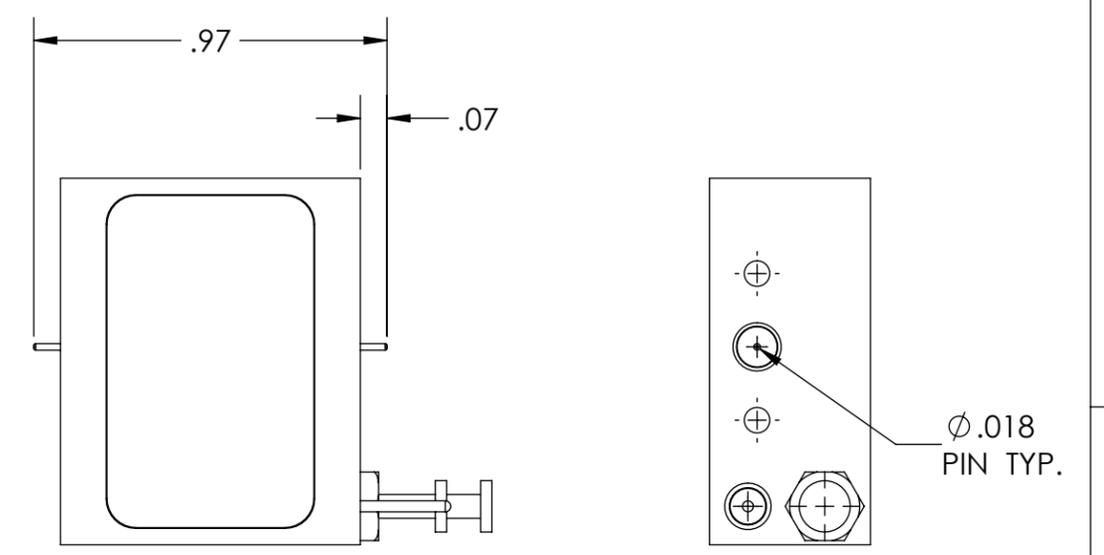
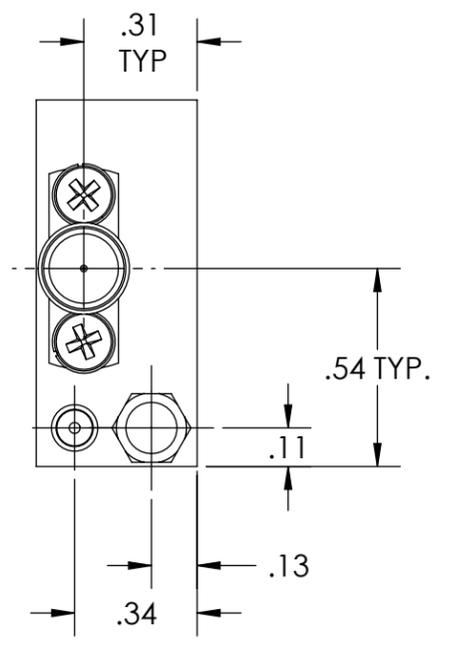
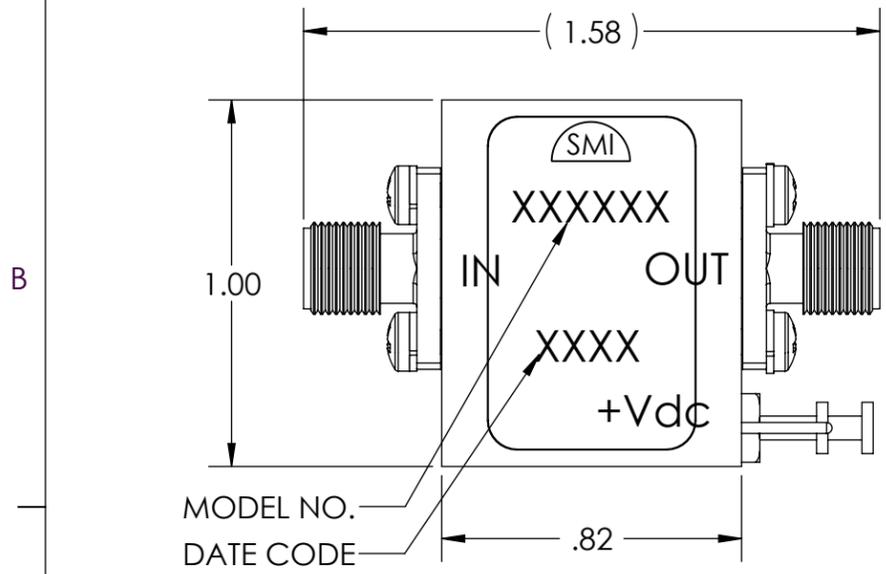
Absolute Maximum (No Damage) Ratings

Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
Case Temperature	+125 °C
DC Voltage	+8 Volts
Continuous RF Input Power	+18 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 μsec Max.)

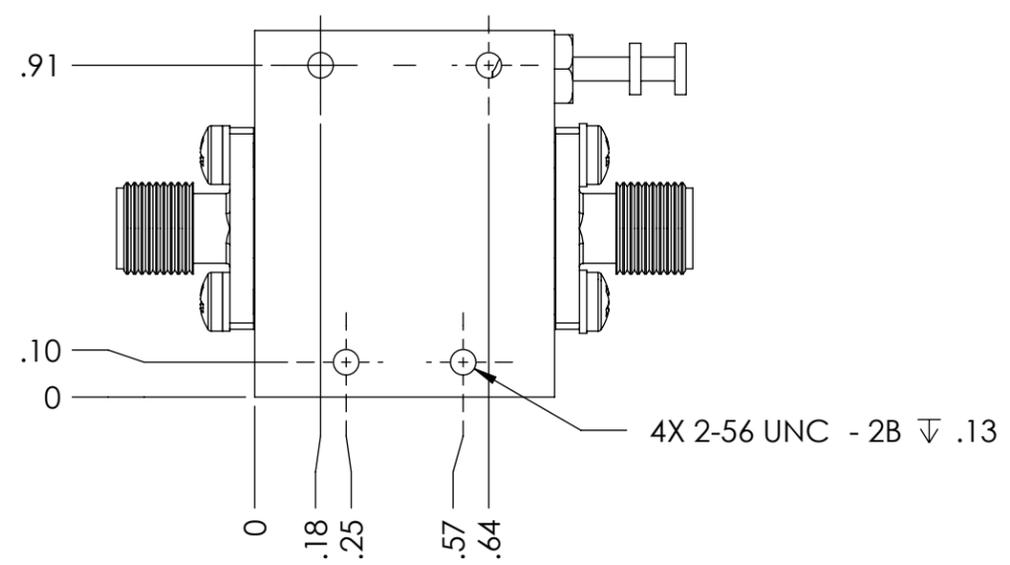
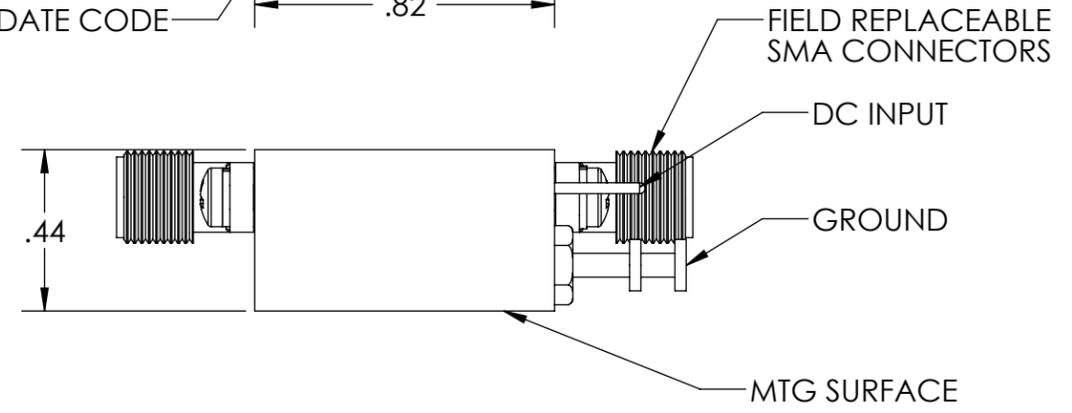
NOTES:

1. HOUSING: 70/30 CN/NI ELECTRONIC GRADE

REVISIONS				
ECN	REV.	DESCRIPTION	CHNG/DATE	APPVD/DATE
XXXX	P1	PRELIMINARY RELEASE	2013/06/24	-



WITHOUT SMA CONNECTORS



CAUTION



THIS ASSEMBLY CONTAINS PARTS SENSITIVE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD). USE ESD PRECAUTIONARY PROCEDURES WHEN TOUCHING, REMOVING OR INSERTING

SEE SEPARATE PARTS LIST IN ELECTRONIC STORAGE

UNLESS OTHERWISE SPECIFIED		3rd ANGLE PROJECTION ANSI		SPECTRUM MICROWAVE, INC 2707 Black Lake Place Philadelphia, PA 19154-1008 (USA)		
* INTERPRET DRAWING IAW ASME Y14.100-2004 * DIMENSIONING AND TOLERANCING IAW ASME Y14.5-1994 * PARENTHETICAL INFORMATION FOR REFERENCE ONLY * DIMENSIONAL LIMITS APPLY BEFORE PROCESSES * DIMENSIONS ARE IN INCHES * TOLERANCES ARE: ANGLES ±1.0° * SURFACE FINISH * REMOVE ALL BURRS AND SHARP EDGES .010 RAD MAX. * CONCENTRICITY MACHINED DIA: .002 FIM * MACHINED TOOL MISMATCH: .002 MAX.		DRAWN WAR CHECKED		DATE 2013/06/24		TITLE
63 2 PLACE DECIMAL ±.02 3 PLACE DECIMAL ±.005		ENGRG PH MFG		2013/06/24		OUTLINE, H1L
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DO NOT SCALE DRAWING				SCALE: 2:1	SHEET 1 OF 1	REV P1

Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

1) Outlines drawings below are for reference only.

PIN 1 - INPUT FOR AMPLIFIERS AND DETECTORS/CONTROL FOR VCO'S
 PIN 2 - GROUND FOR AMPLIFIERS/CONTROL FOR DETECTORS & ATTENUATORS
 (SEE FOOTPRINTS FOR DETAILS)
 PIN 3 - OUTPUT
 PIN 4 - +DC

