

RF AMPLIFIER

MODEL WN3105

Available as: WN3105, 10 Pin 0.625" Sq. Gullwing (SG4)
 BX3105, SMA Connectorized Housing (H1L)

Features

- High Output Power: +28 dBm Typical
- High Third Order I.P: +44 dBm Typical
- Operating Temp. - 55 °C to +85 °C

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +81 dBm (Typ.)
 Second Order Two Tone Intercept Point +75 dBm (Typ.)
 Third Order Two Tone Intercept Point +44 dBm (Typ.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency (MHz)	0.5 - 300 MHz	0.5 - 200 MHz
Gain (dB)	12.0	10.0 Min.
Power @ 1 dB Comp. (dBm)	28.0	27.0 Min.
Gain Flatness (dB)	<±0.5	±0.7 Max.
VSWR In	<1.5:1	1.9:1 Max.
VSWR Out	<1.5:1	1.9:1 Max.
Noise Figure (dB)	4.5	5.7 Max.
Power Vdc	+15	+15
mA	235	260 Max.

Absolute Maximum (No Damage) Ratings

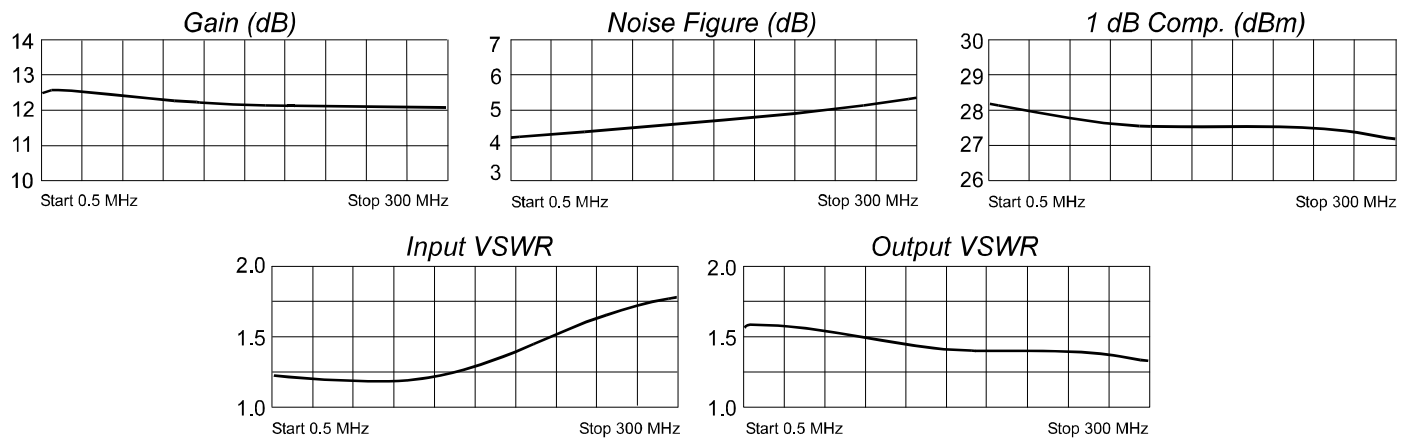
Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +17 Volts
 Continuous RF Input Power +17 dBm
 Short Term RF Input Power..... 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Revision: 3/8/2016

ECN: Max Input Power Reduced From +20 dBm to +17 dBm

* Measured in a 50-Ohm system at +15 Vdc unless otherwise specified.

Typical Performance Data



Legend ——— +25 °C



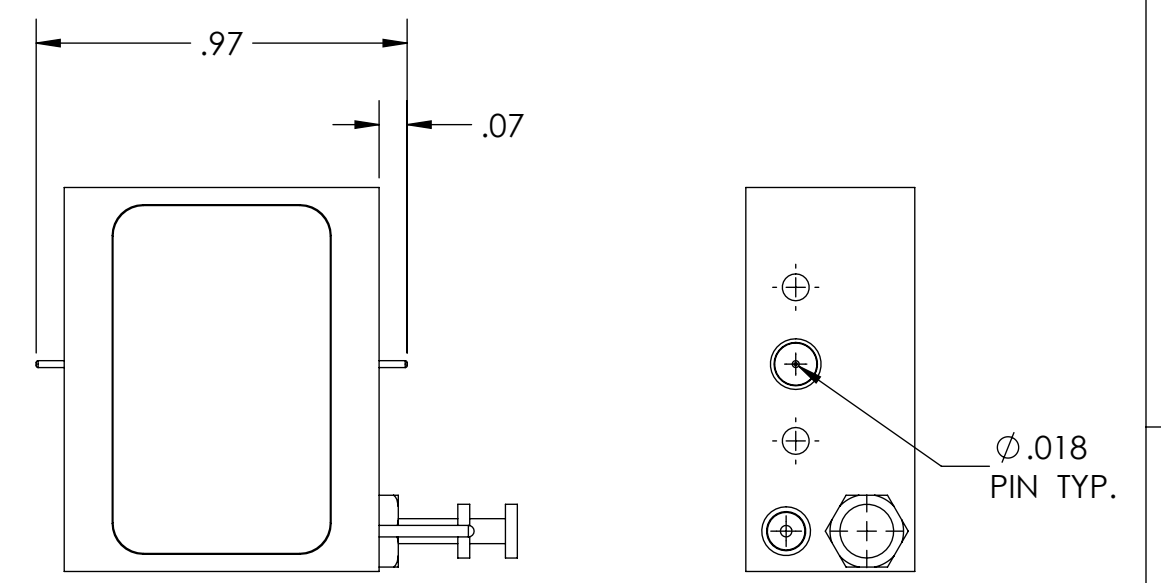
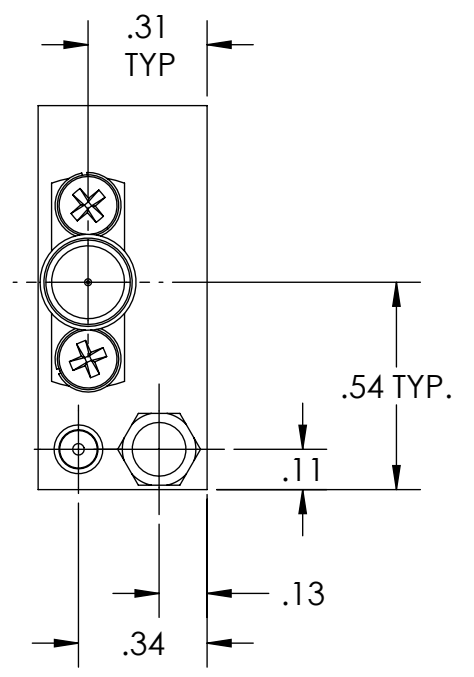
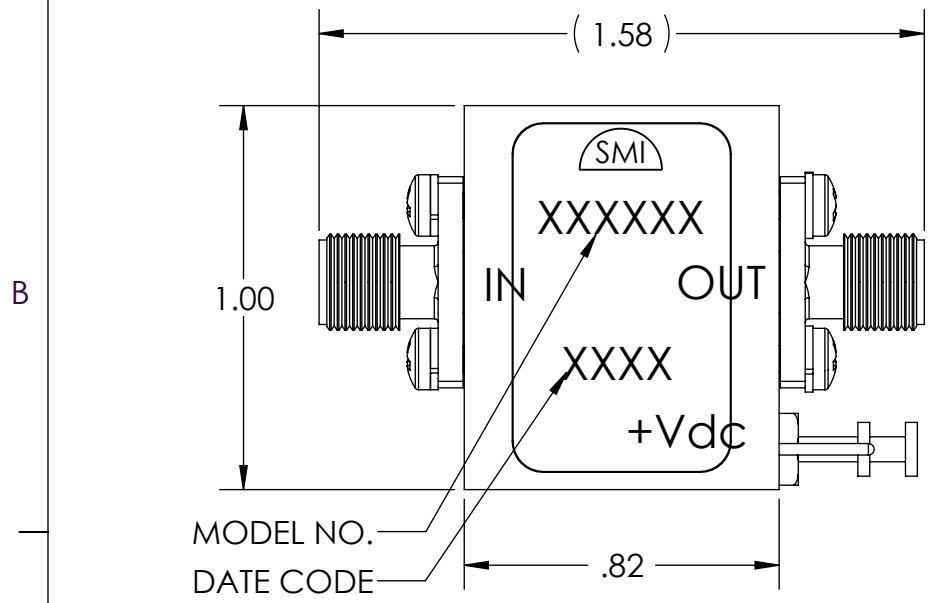
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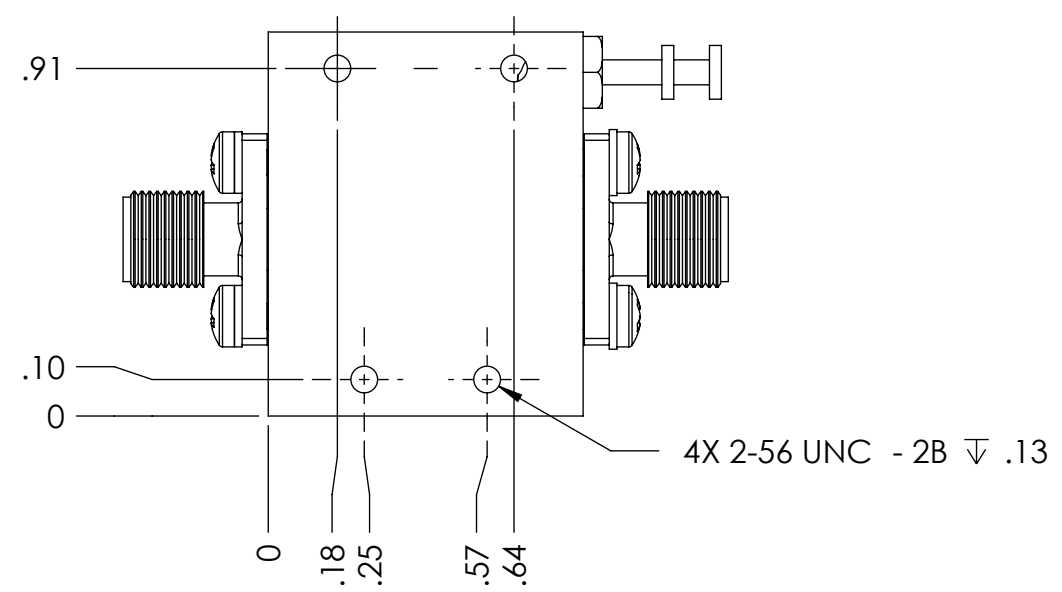
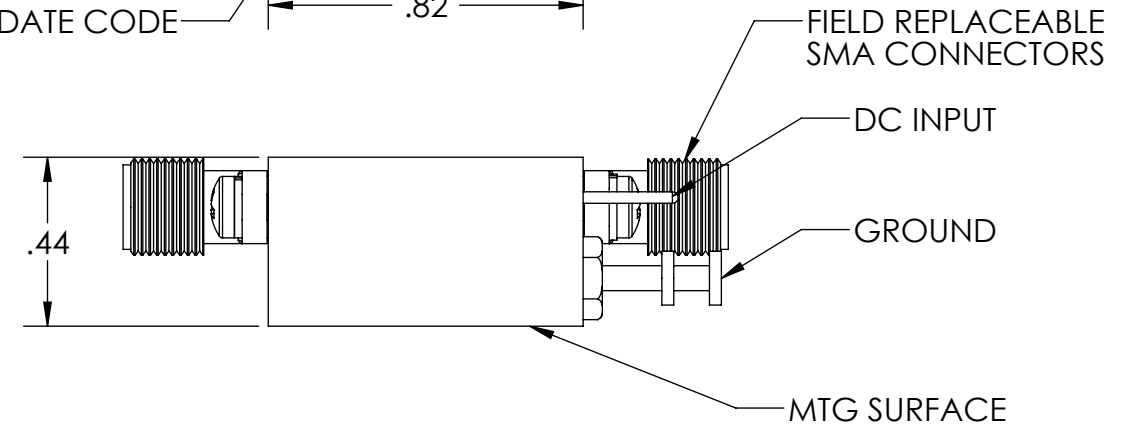
NOTES:

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

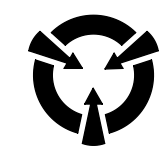
REVISIONS				
ECN	REV.	DESCRIPTION	CHNG/DATE	APPVD/DATE
XXXX	P1	PRELIMINARY RELEASE	2013/06/24	-



WITHOUT SMA CONNECTORS



CAUTION



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

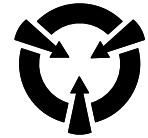
SEE SEPARATE PARTS LIST IN ELECTRONIC STORAGE

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UNLESS OTHERWISE SPECIFIED		3rd ANGLE PROJECTION	
* INTERPRET DRAWING IAW ASME Y14.100-2004		ANSI	
* DIMENSIONING AND TOLERANCING IAW ASME Y14.5-1994		DRAWN	DATE
* PARENTHETICAL INFORMATION FOR REFERENCE ONLY		WAR	2013/06/24
* DIMENSIONAL LIMITS APPLY BEFORE PROCESSES		CHECKED	
* DIMENSIONS ARE IN INCHES		ENGRG	
* TOLERANCES ARE: ANGLES ±1.0°		PH	2013/06/24
63/2 PLACE DECIMAL ±.02		MFG	
3 PLACE DECIMAL ±.005		QA	
* SURFACE FINISH			
* REMOVE ALL BURRS AND SHARP EDGES .010 RAD MAX.			
* CONCENTRICITY MACHINED DIA: .002 FIM			
* MACHINED TOOL MISMATCH: .002 MAX.			
DO NOT SCALE DRAWING			

SPECTRUM MICROWAVE, INC			
2707 Black Lake Place			
Philadelphia, PA 19154-1008 (USA)			
TITLE			
OUTLINE, H1L			
SIZE	CAGE CODE	DWG NO.	REV
B	60979	088-00386	P1
SCALE:		SHEET	
2:1		1	OF 1

REVISIONS				
ECN	REV.	DESCRIPTION	CHNG/DATE	APPVD/DATE
--	P1	PRELIMINARY RELEASE	2012/05/14	

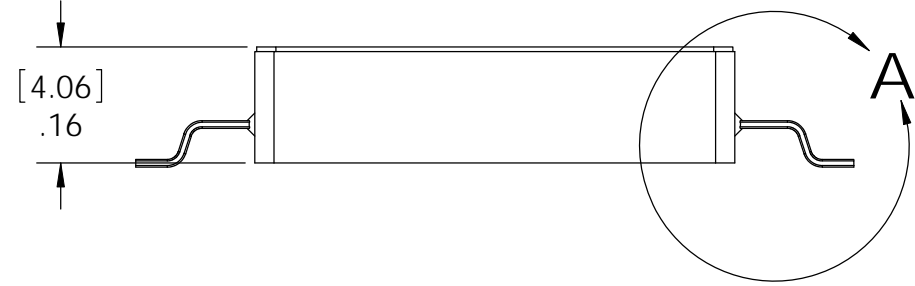
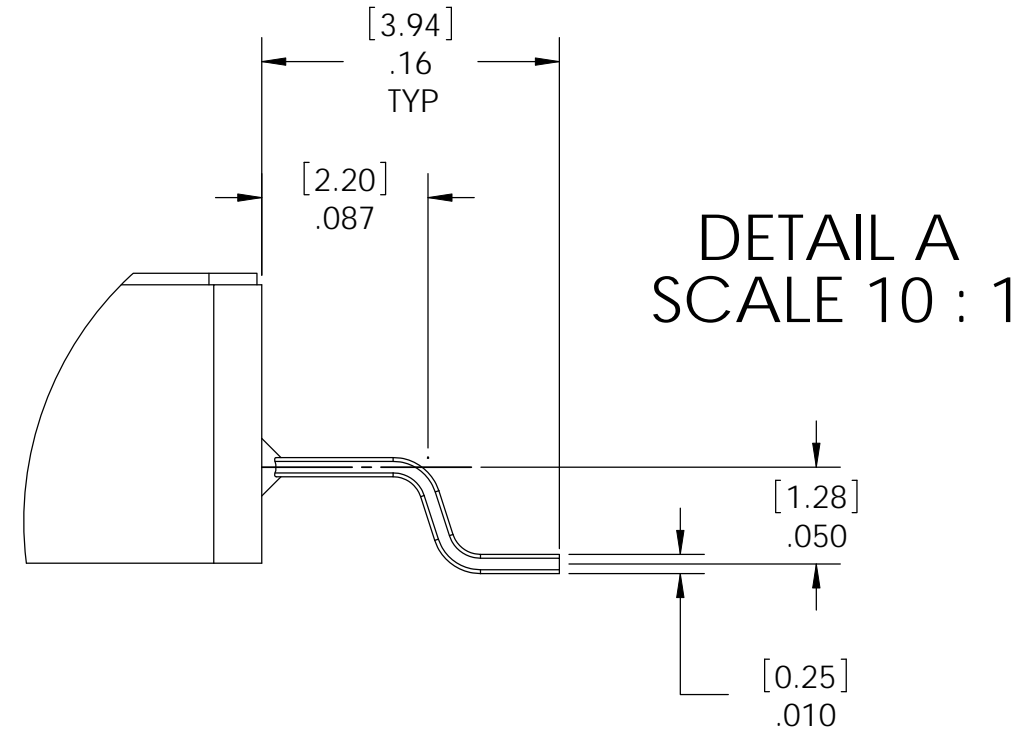
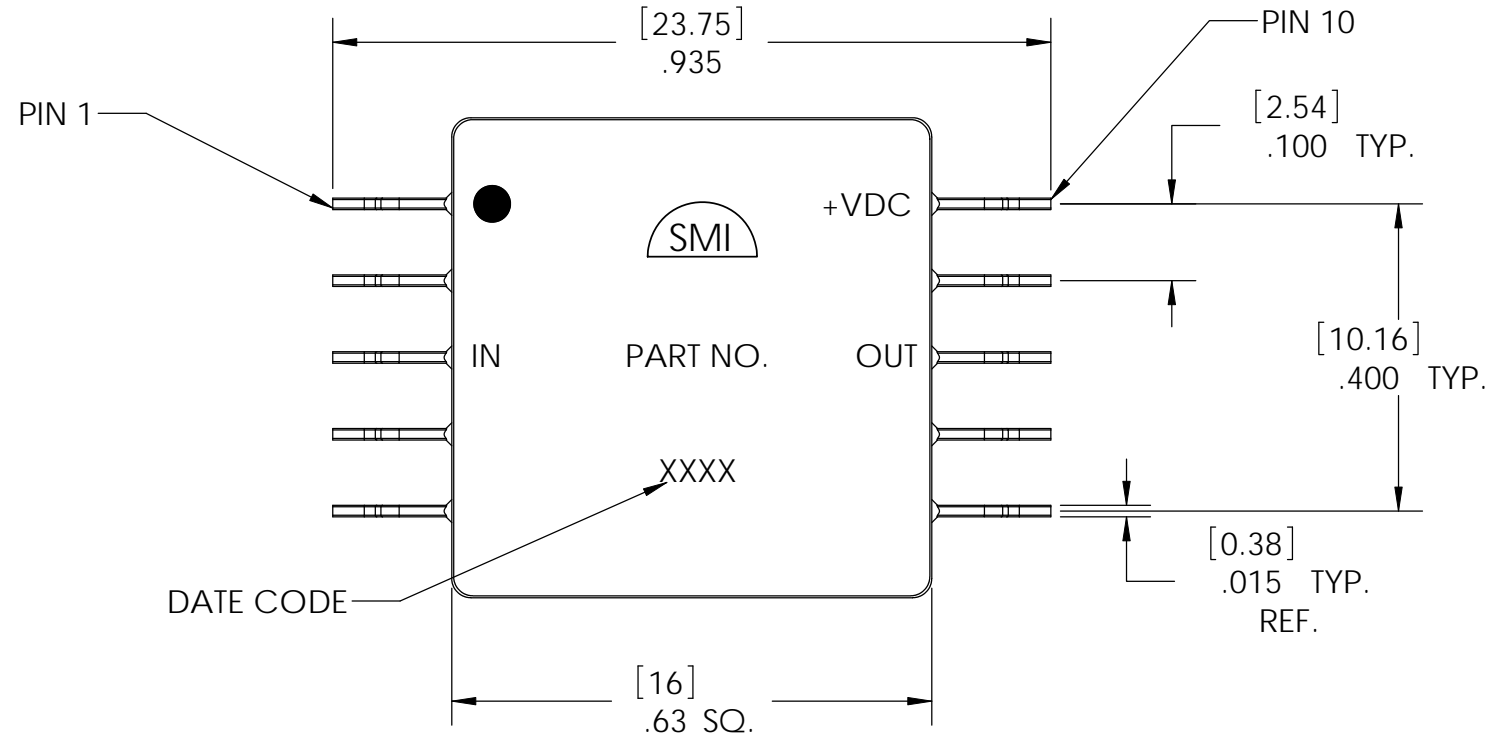


CAUTION

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- NOTES:
- MATERIAL: KOVAR
 - FINISH: NICKEL/GOLD

PIN TABLE	
PIN 3	RF IN
PIN 8	RF OUT
PIN 10	DC
ALL OTHER	GROUND
CASE	GROUND



SEE SEPARATE PARTS LIST IN ELECTRONIC STORAGE

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		CHECKED			
		ENGRG PH	2012/05/14		
		MFG			
		QA		SIZE B	CAGE CODE 60979
		DO NOT SCALE DRAWING		DWG NO. 088-00305	REV P1
		SCALE: 4:1		SHEET 1 OF 1	

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