

RF AMPLIFIER

MODEL TN9421

Available as: TN9421, 4 Pin .450" Sq. Surface Mount (SM3)
 BX9421, SMA Connectorized Housing (H1L-Laser)
 BXP9421, SMA Connectorized Housing (HPak)

Features

- Wide Bandwidth 950-4200 MHz
- Low Noise Figure: 1.8 dB Typical
- Cross to the Cougar AS4221, our Model TN9421
- Cross to the Cougar ACP4221, our Model BXP9421
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C*

Second Order Harmonic Intercept Point..... +48 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+42 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+26 dBm (Typ.)
 *Typical @ 25 °C

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	950 - 4200 MHz	950 - 4200 MHz
Gain	13.0 dB	11.5 dB Min.
Gain Flatness	+/- 0.5 dB	+/- 1.0 Max.
Noise Figure	1.8 dB	2.7 dB Max.
VSWR In	1.7:1	2.0:1 Max.
VSWR Out	1.7:1	2.0:1 Max.
Power Output @ 1 dB Comp.	+14.0 dBm	+12.5 dBm Min.
Reverse Isolation	23 dB	—
Power Vdc	+15	+15
mA	40	46 Max.

Absolute Maximum (No Damage) Ratings

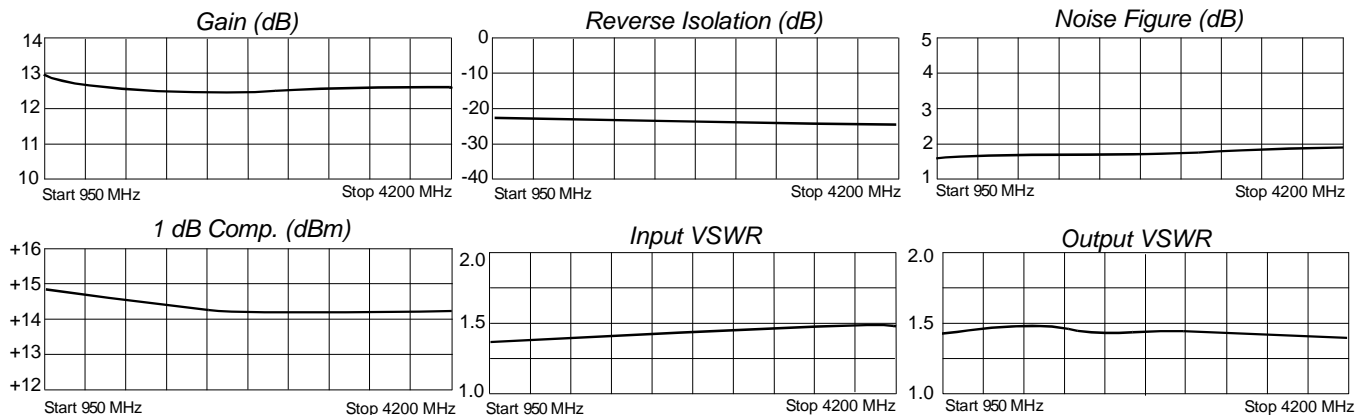
Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 DC Voltage +20 Volts
 Continuous RF Input Power +7.5 dBm
 Short Term RF Input Power +10 dBm (1 Minute Max.)
 Maximum Peak Power +13 dBm (3 µsec Max.)

Note: Measured in a 50 ohm system at +15 volts DC.

Note: Care should always be taken to effectively ground the case of each unit.

Revision 5/14/2012

Typical Performance Data



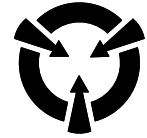
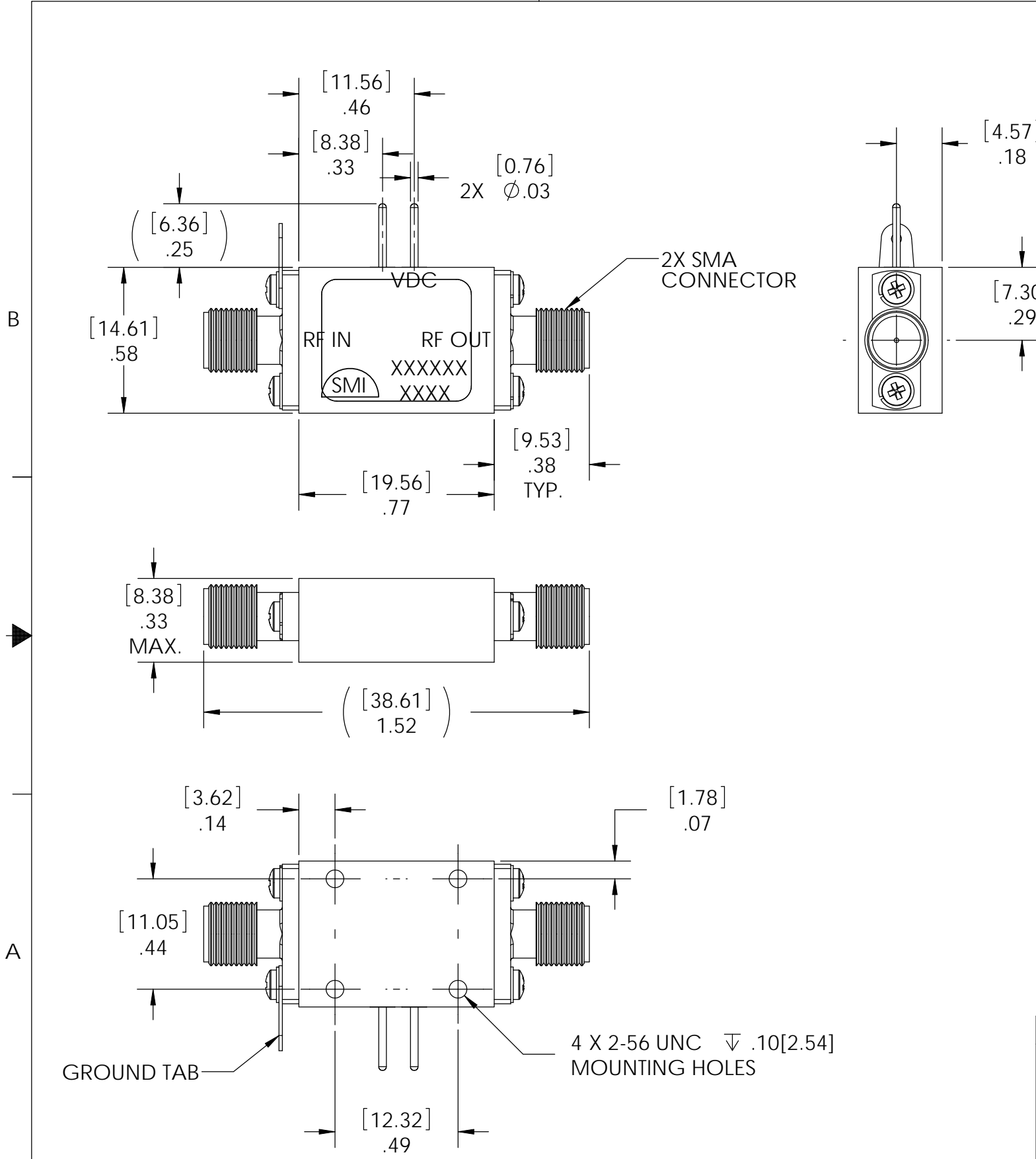
Legend ——— +25 °C - - - - +85 °C ······ -55 °C



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



CAUTION

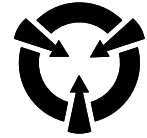
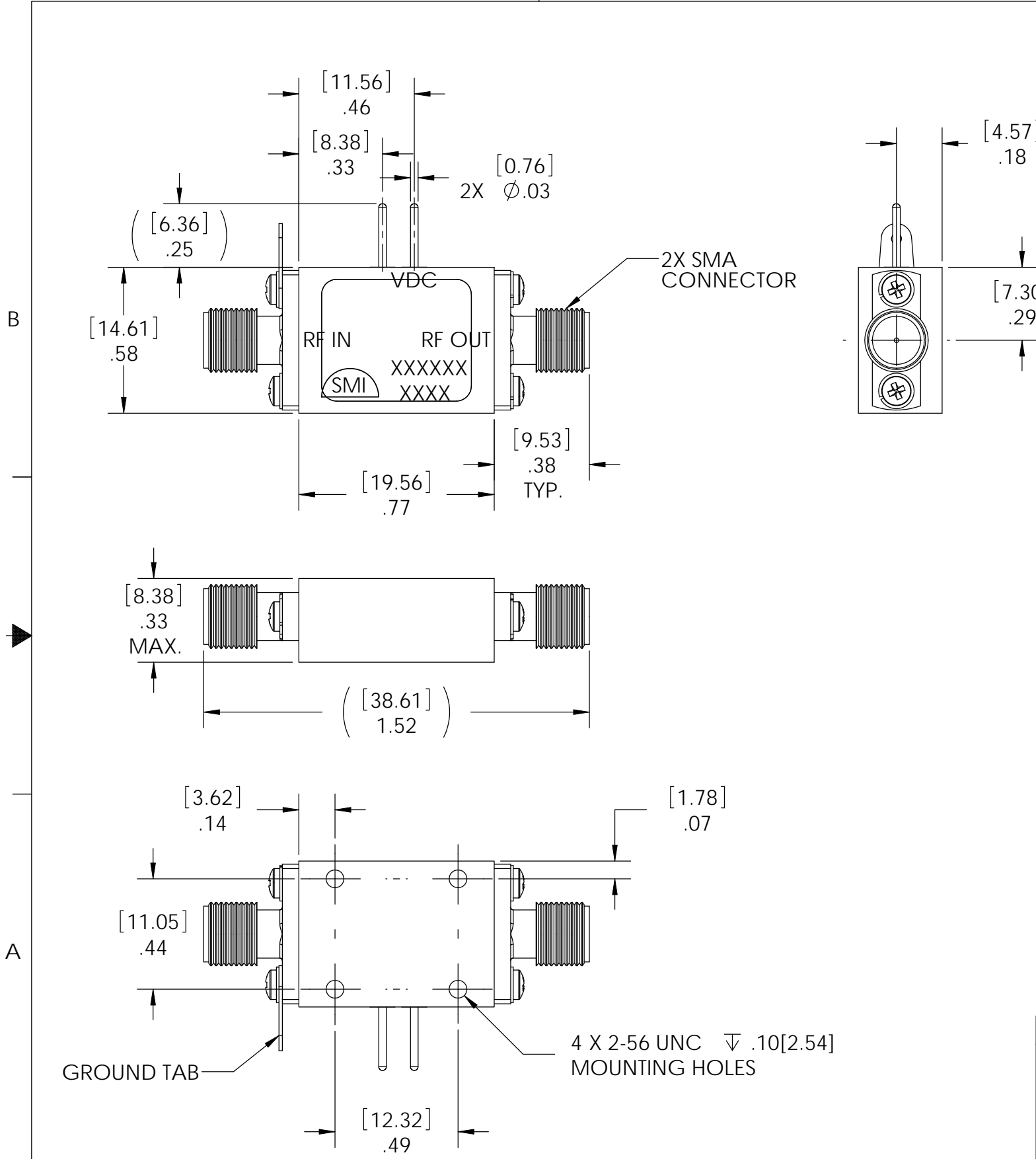
THIS ASSEMBLY CONTAINS PARTS SENSITIVE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD). USE ESD PRECAUTIONARY PROCEDURES WHEN TOUCHING, REMOVING OR INSERTING

SEE SEPARATE PARTS LIST IN ELECTRONIC STORAGE

UNLESS OTHERWISE SPECIFIED		3rd ANGLE PROJECTION		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.		ANSI				
63 2 PLACE DECIMAL ±.02 3 PLACE DECIMAL ±.005		DRAWN WAR	DATE 2012/05/14	OUTLINE, HPAK		
DO NOT SCALE DRAWING		CHECKED	ENGRG H PHAM			
		MFG	QA	DWG NO. 088-00304	REV P1	SCALE: 1.5:1
				SHEET 1 OF 1		

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