RF AMPLIFIER MODEL *BXMP1029*

Medium Power Amplifier

Available as: BXMP1029, SMA Connectorized Housing
BXMP1029LF (Lead-Free Version)

Features

- Ultra High Second Order Intercept: +91 dBm Typical
- High Output Power: +31.5 dBm Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +70 ºC
Frequency	1 - 35 MHz	1 - 35 MHz
Gain (dB)	12	11 Min.
Power @ 1 dB Comp. (dBm)	31.5	30 Min.
Reverse Isolation (dB)	-15	-14 Max.
VSWR In Out	1.8:1 1.8:1	2:0:1 Max. 2:0:1 Max.
Noise figure* (dB)	4.5	5.5 Max.
Power Vdc mA	+15 400	+15 425 Max.

Note: Care should always be taken to effectively ground the case of each unit.
* Noise Figure performance is only measured and guaranteed above 15 MHz.

Typical Intermodulation Performance at 25 º C

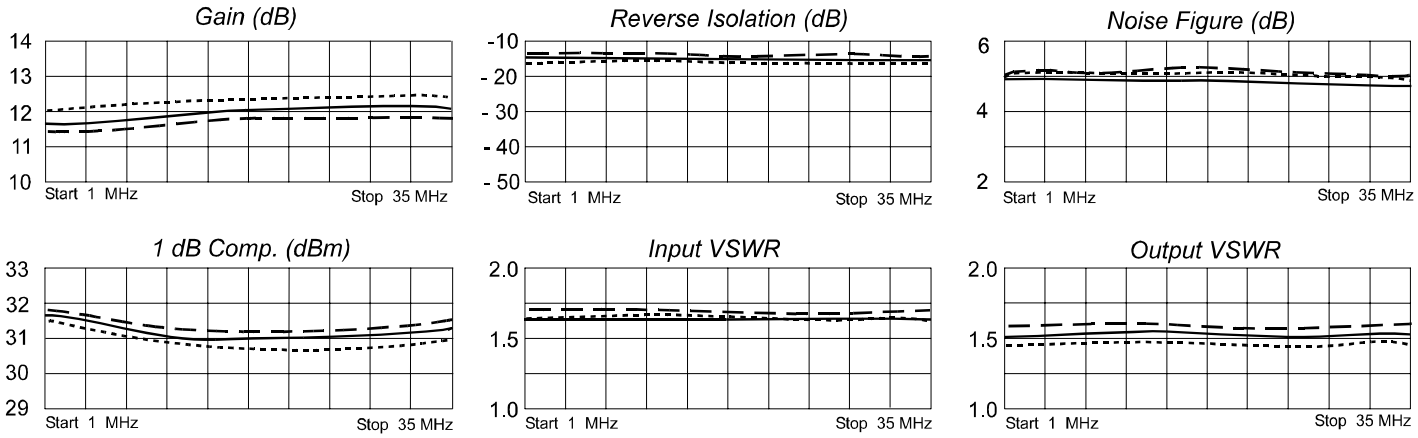
Second Order Harmonic Intercept Point ..... +90 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +88 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +45 dBm (Typ.)

Absolute Maximum (NO DAMAGE) Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 18 Volts
Continuous RF Input Power ..... + 13 dBm
Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

*All Intercept values are obtained from midband measurements.
ECN: Intercept Values reduced:
IP3; 45 dBm from 48 dBm
IP2; 91 dBm to 88 dBm
NF increased to 5.5 dB
Revision 8-10-2023

Typical Performance Data



Legend ——— *+ 25 ºC* – – – *+ 70ºC* - - - - - - *0 ºC*

SPECTRUM CONTROL

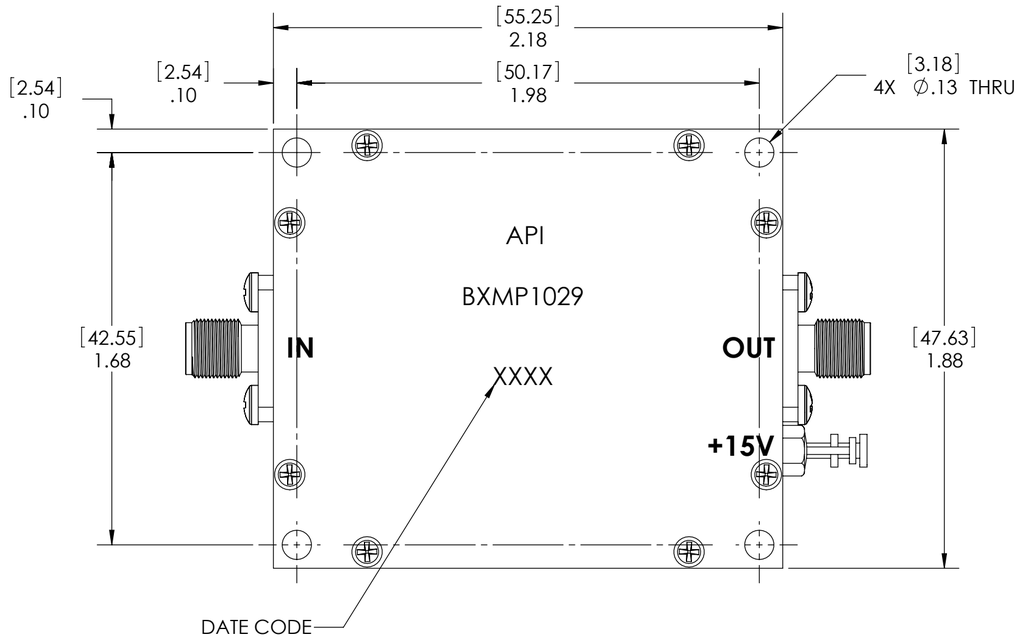
www.SpectrumControl.com · *2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001*

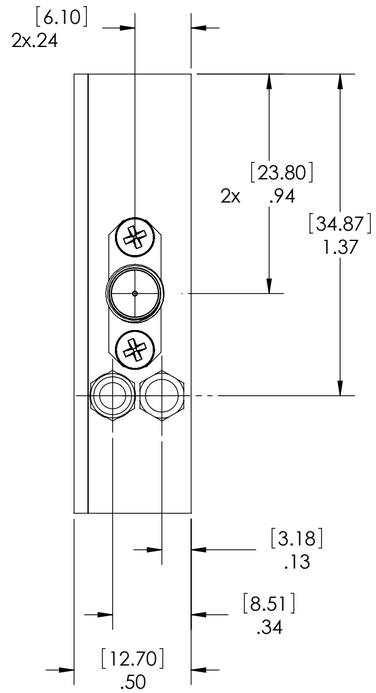
DWG NO.	SH	REV
088-00429	1 OF 1	-

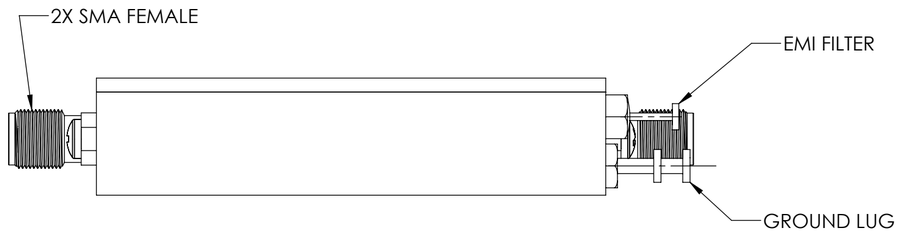
REVISIONS				
ECN	REV.	DESCRIPTION	CHNG/DATE	APPVD/DATE
1494	-	RELEASE		

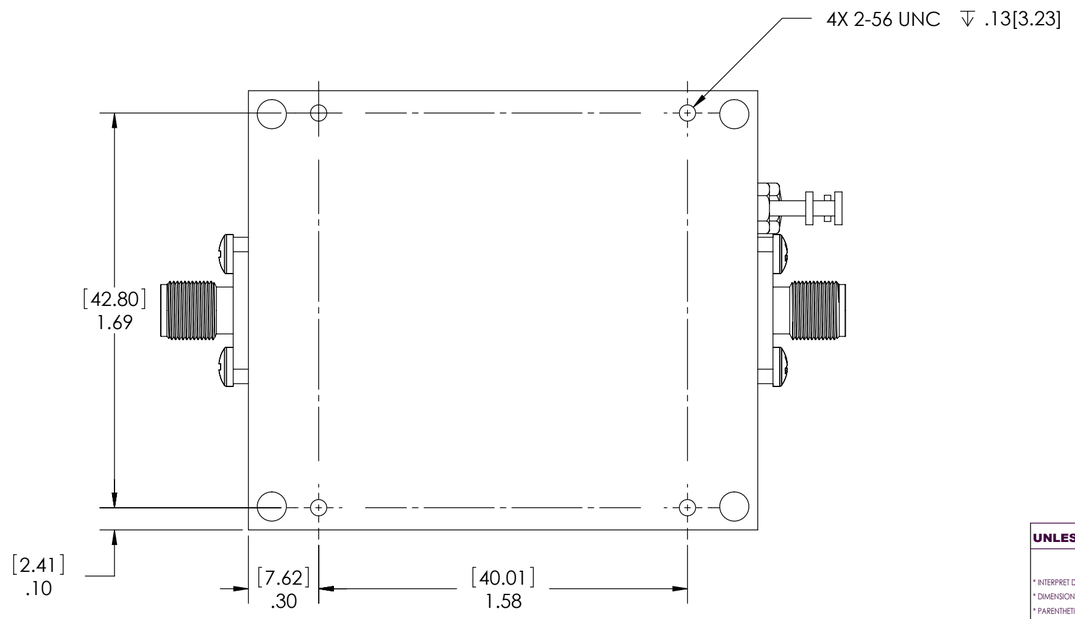
NOTE:

1. MATERIAL: HOUSING ALUMINUM, NICKEL PLATED









CAUTION

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

ADD -U AFTER DRAWING NUMBER TO FORM COMPLETE PART NUMBER FOR UNPLATED PART

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UNLESS OTHERWISE SPECIFIED

* 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° 2 PLACE DECIMAL ±.02 3 PLACE DECIMAL ±.005
* SURFACE FINISH 63
* REMOVE ALL BURRS AND SHARP EDGES .010 RAD MAX.
* CONCENTRICITY MACHINED DIA: .002 FIM
* MACHINED TOOL MISMATCH: .002 MAX.

DO NOT SCALE DRAWING

3rd ANGLE PROJECTION

ANSI

		DATE
DRAWN	WAR	2014/11/13
CHECKED		
ENGRG	HP	2014/11/13
MFG		
QA		
APPROVED		

api technologies corp.

PHILADELPHIA OPERATIONS
2707 BLACK LAKE PLACE,
PHILADELPHIA PA. 19154 (USA)

TITLE

OUTLINE, BXMP1029

SIZE	CAGE CODE	DWG NO.	REV
C	60979	088-00429	-

SCALE: 2:1 SHEET 1 OF 1

COMPUTER ASSISTED DRAWING
GENERATED USING SOLIDWORKS 2012

FORM NO. 1054 SIZE C1