

RF AMPLIFIER

MODEL BXMP1026

Medium Power Amplifier

Available As: BXMP1026, SMA Connectorized Housing

Features

- High Power Output: Greater Than 2 Watts
- High Third Order Intercept: +43 dBm Typical
- Unconditionally Stable

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +66 dBm (Typ.)
 Second Order Two Tone Intercept Point +63 dBm (Typ.)
 Third Order Two Tone Intercept Point. +43 dBm (Typ.)

Specifications

CHARACTERISTIC		TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +60 °C
Frequency (MHz)		50 - 250 MHz	50 - 250 MHz
Gain (dB)		31.0	29.0 Min.
Power @ 1 dB* Comp. (dBm)		33.5	33 Min.
Reverse Isolation (dB)		-38	---
VSWR	In	1.8:1	2:0:1 Max.
	Out	1.8:1	2:0:1 Max.
Noise Figure (dB)		3.5	4.5 Max.
Power	Vdc	+15	+15
	mA	660	700 Max.
K Factor		>1.0	>1.0

Maximum (No Damage) Ratings

Ambient Operating Temperature -30°C to +85 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +150 °C
 DC Voltage +18 Volts
 Continuous RF Input Power +13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

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

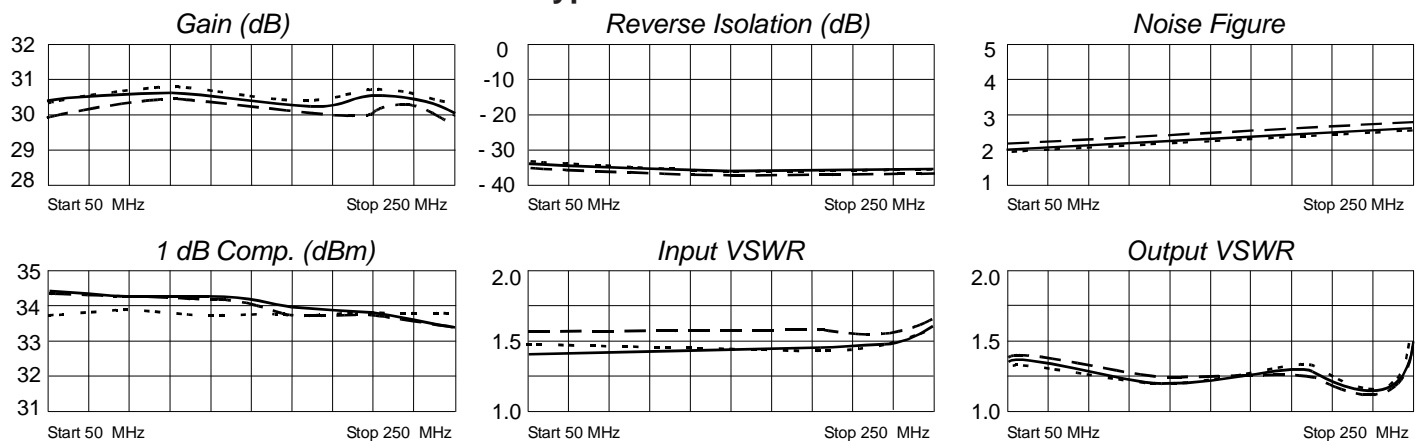
Revision: 3/7/2016

ECN: Addition of K Factor Testing

Input Power CW: +13 dBm

*Power Output @1 dB Comp: +32 dBm above 200 MHz

Typical Performance Data



Legend ——— +25 °C - - - - +60 °C · · · · · 0 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
50	.21	30	31.97	-43	.0098	147	.13	129
70	.20	-38	31.53	-65	.0092	134	.09	116
90	.20	-47	31.30	-85	.0094	113	.04	94
110	.20	-58	31.19	-106	.0100	92	.02	-51
130	.19	-68	30.95	-216	.0095	81	.07	-91
150	.18	-77	30.85	-147	.0097	59	.12	-109
170	.17	-85	30.80	-167	.0097	40	.16	-125
190	.16	-90	30.84	173	.0108	36	.19	-142
210	.16	-94	31.07	153	.0100	4	.20	-160
230	.18	-98	31.39	132	.0113	-4	.20	179
250	.21	-106	31.94	110	.0105	-28	.17	152



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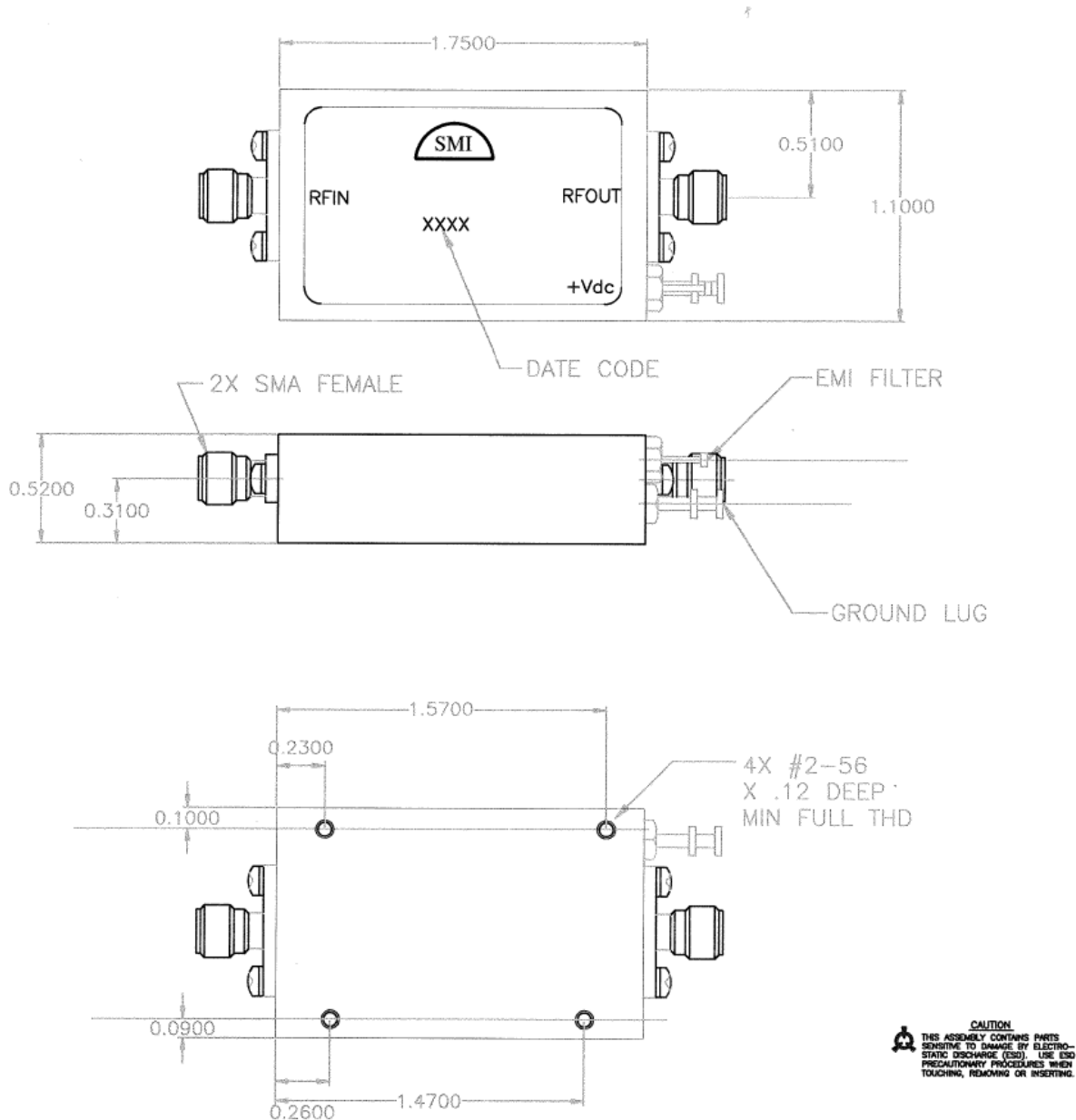
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Instructions

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.	

Outline Drawing (BXMP1026)

(For reference only)



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