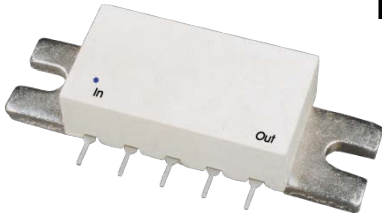


RF/Microwave Amplifier



Features

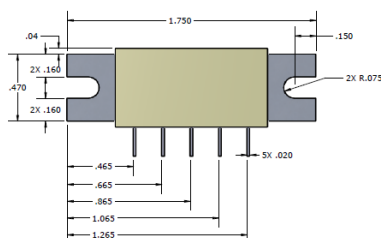
- High Gain: 35.5 dB
- High Output Power: 2 watts
- High Linearity
- Surface-mount Style Design
- EAR99

Technical Specifications

Characteristic	TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency	1 – 200 MHz	1 – 200 MHz
Gain (dB)	35.5	34 Min / 37 Max
Gain Flatness (dB)	+/- 0.5	+/- 1.0 Max
Power @ 1 dB Comp. (dBm)	+33	+31 Min.
3 rd Order Intercept (dBm)	+48	+45 Min
Reverse Isolation (dB)	45	---
VSWR	In	1.5:1
	Out	1.5:1
Noise Figure (dB)	4.5	6.0 Max.
Power	Vdc	+28
	mA	435
		470 Max.

Notes:

- 1) Typical values are measured at 25°C, but not guaranteed.
- 2) Care should always be taken to effectively ground the case of each unit.
- 3) Package outlines drawings below for reference only.
- 4) Maximum operating temperature is defined as that temperature which, if exceeded for extended periods, could result in premature unit failure. This data is provided for user reliability information. This may or may not represent the maximum temperature for electrical parameter specifications.
- 5) Min/Max specifications are guaranteed when tested in a 50 Ohm system.



Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+58 dBm (Typ.)
Second Order Two Tone Intercept Point:	+53 dBm (Typ.)
Third Order Two Tone Intercept Point:	+48 dBm (Typ.)

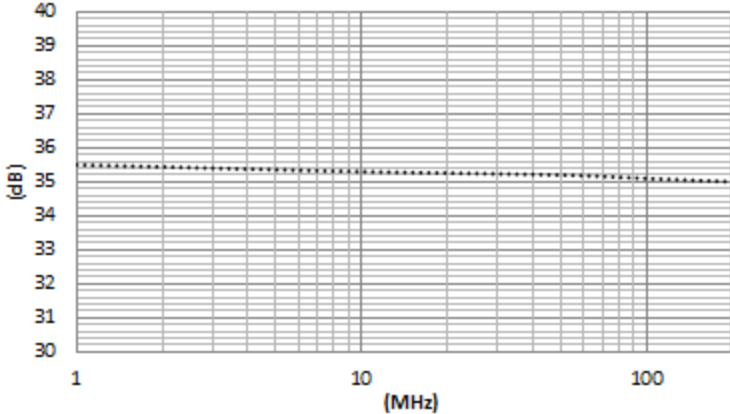
Note: Measured at 100 MHz

Absolute Maximum (No Damage) Ratings

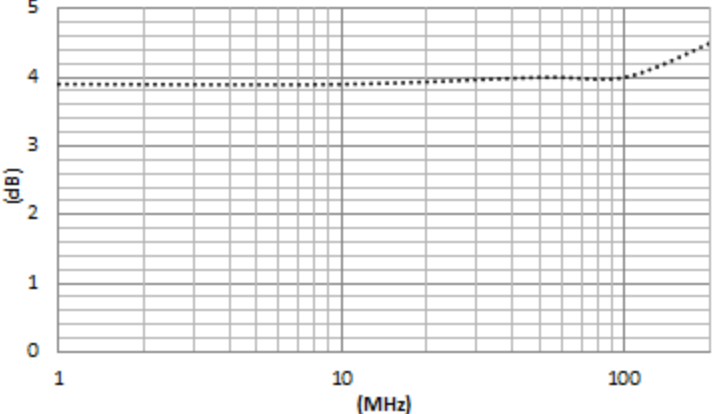
Operating Temperature	-20°C to +90 °C
Storage Temperature	-40°C to +100°C
DC Voltage	+30 Volts
Continuous RF Input Power	+5 dBm
Short Term RF Input Power	100 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.1 Watt (3 μsec Max.)

Typical Performance Graphs

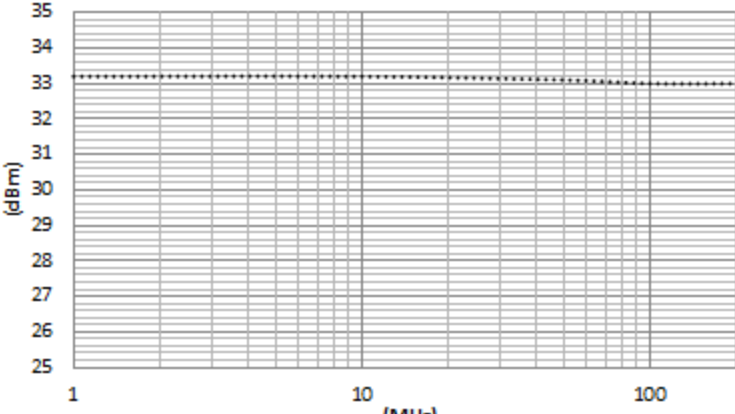
Gain



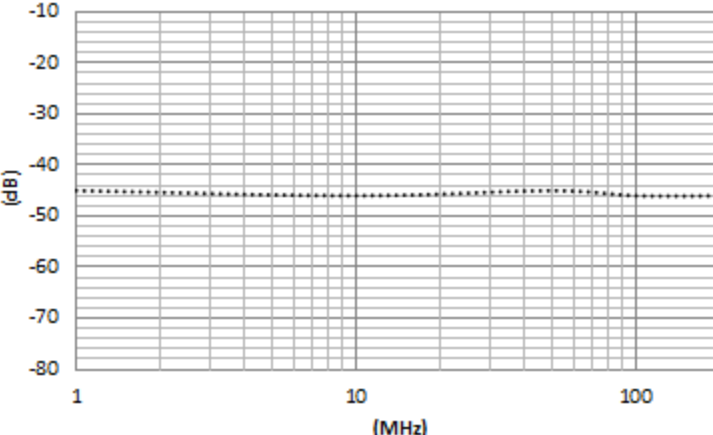
Noise Figure



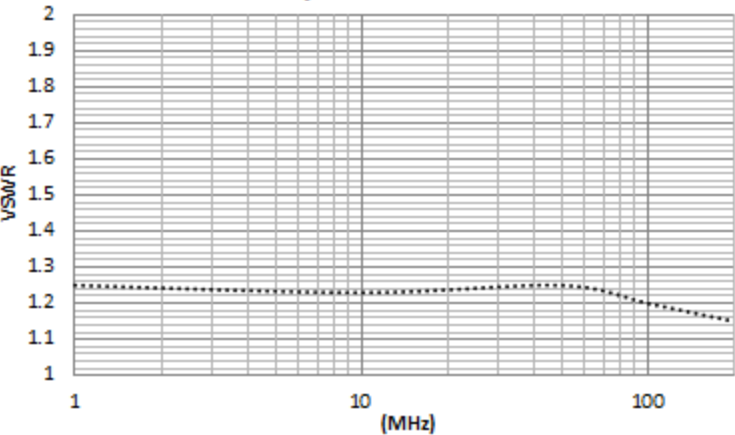
Output Power (1 dB Compression)



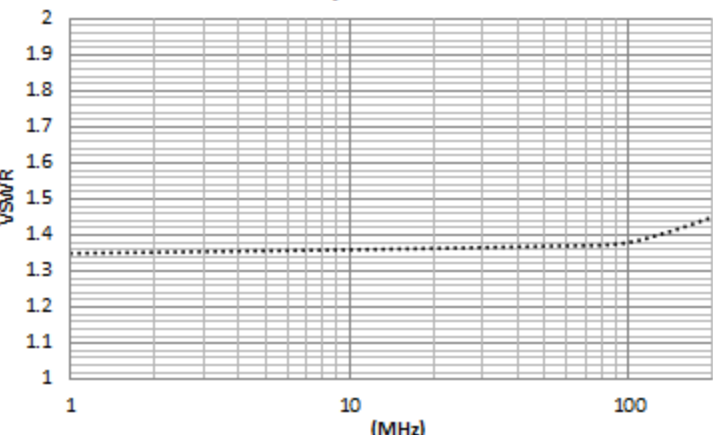
Reverse Isolation



Input VSWR

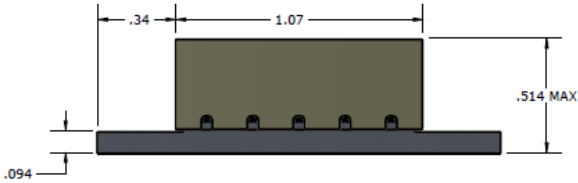
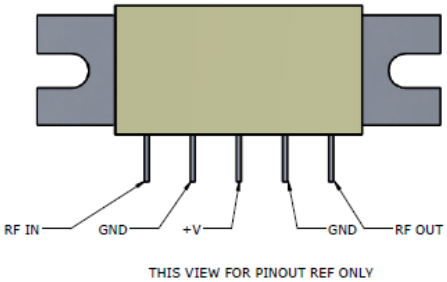
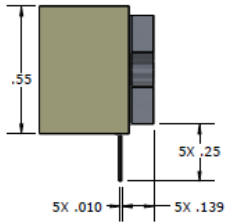
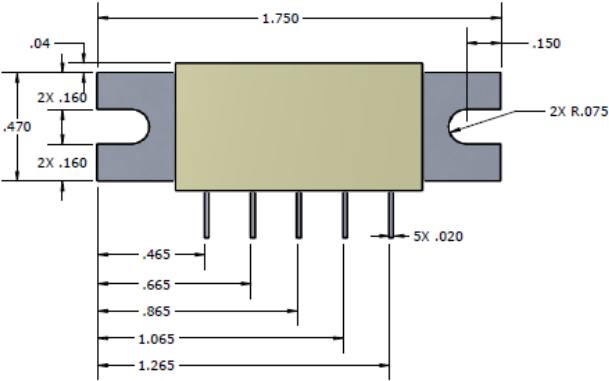


Output VSWR



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.	



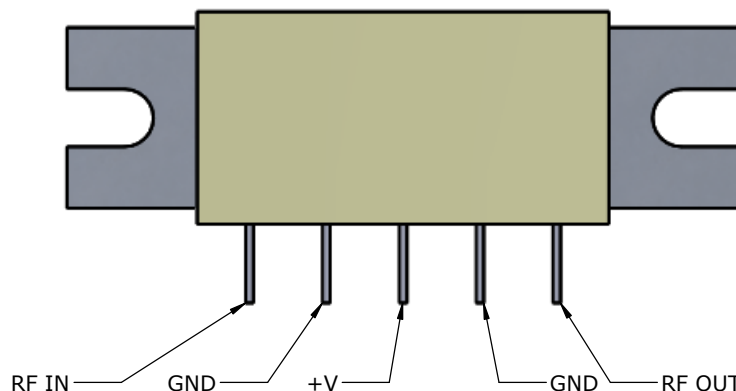
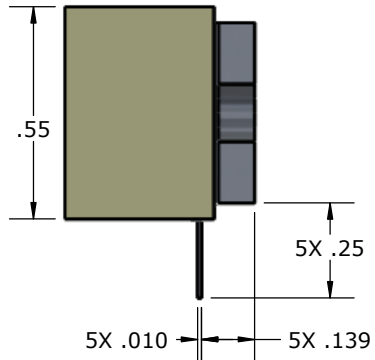
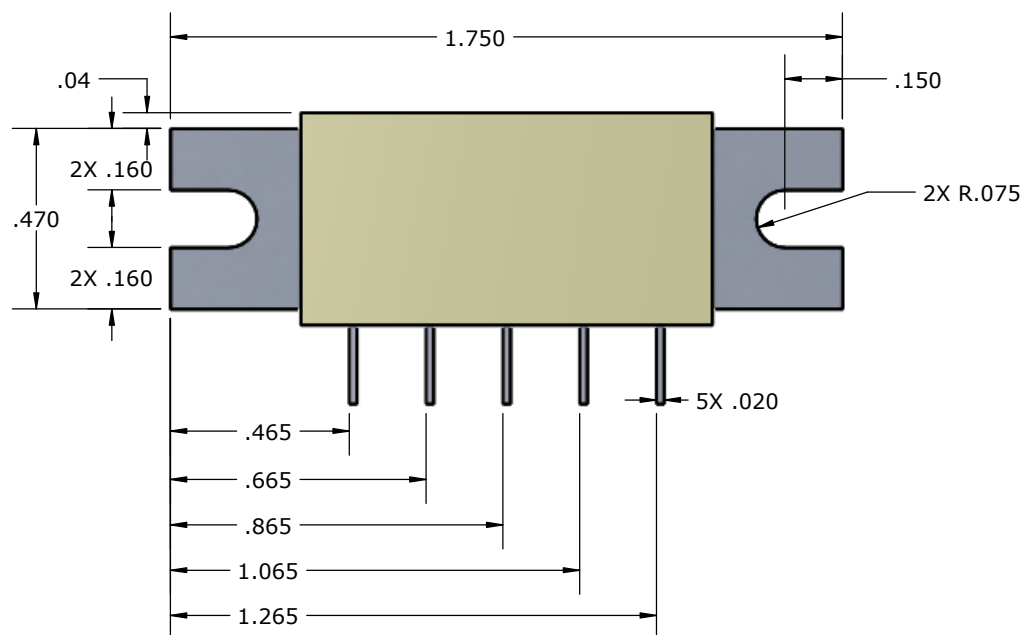
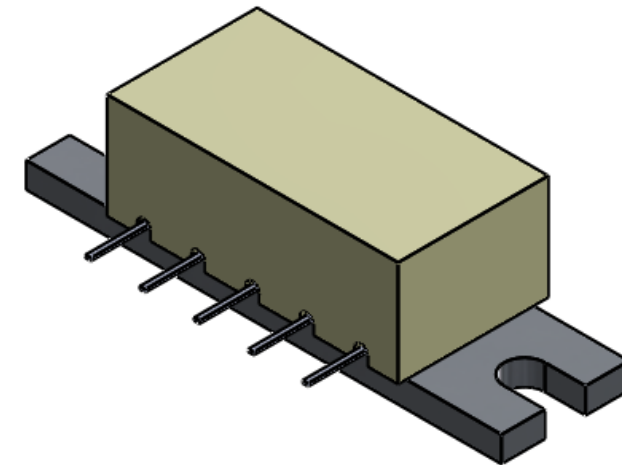
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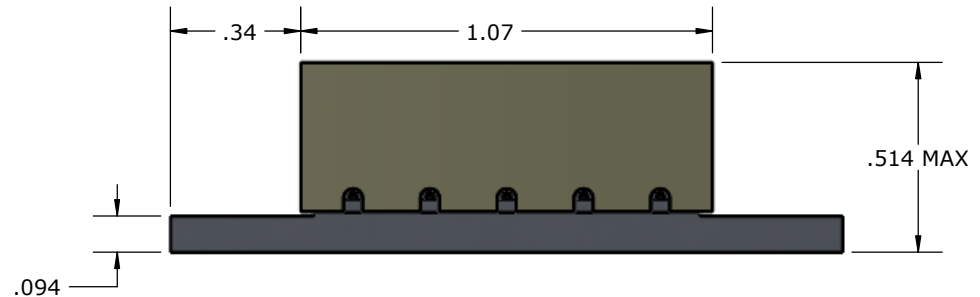
NOTES;

- 1. MATERIAL: HEAT SINK - ALUMINUM 6061-T6
COVER - 15% GLASS REINFORCED PBT RESIN
COLOR - WHITE
LEADS - PHOSPHOR BRONZE
- 2. FINISH: HEAT SINK - 50 uIN OF GOLD OVER 100 uIN OF NICKEL
LEADS - 30-60 uIN GOLD OVER NICKEL
- 3. MAX WEIGHT: N/A

REVISIONS				
ECN	REV	DESCRIPTION	CHNG/DATE	APPVD/DATE
TBD	1	PROTOTYPE	CHNG/DATE	APPVD/DATE



THIS VIEW FOR PINOUT REF ONLY



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 ±.010

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- * 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

3rd ANGLE PROJECTION	
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DRAWN K. BOYCE	DATE 06/18/2015
CHECKED	
ENGRG J. CALLAWAY	6/18/2015
MFG	
QA	

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