

RF AMPLIFIER

MODEL QBH-8508

Available as: QBH-8508, 0.500" Sq. Package (E52-19422)

Features

- Medium Gain: 17 dB Typical
- Low Noise Figure: 1.4 dB Typical
- Operating Temp. -40 °C to +70 °C
- Environmental Screening Available

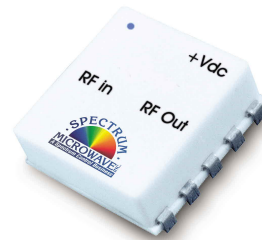
Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +70 °C
Frequency	30 - 400 MHz	30 - 400 MHz
Gain (dB)	17 Min.	—
Gain vs. Temperature	—	+1.5 Max.
Gain Flatness	0.3	0.6 Max.
Reverse Isolation (dB)	-21	-19 Min.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.6:1	2.0:1 Max.
1 dB Compression (dBm)	+12	+10 Min.
Output Intercept Point 3rd Order	+25	+22 Min.
2nd Order	—	—
Noise Figure (dB)	1.4	2.0 Max.
Power Vdc	+5	+5
mA	150	170 Max.

Revision 10/1/2013

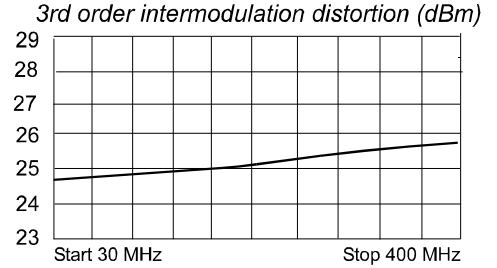
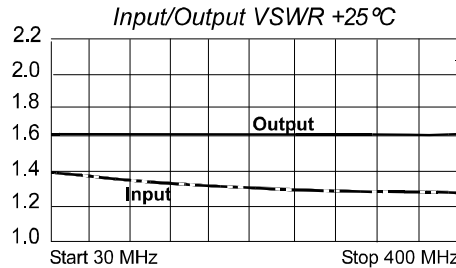
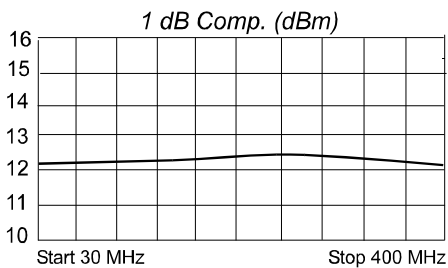
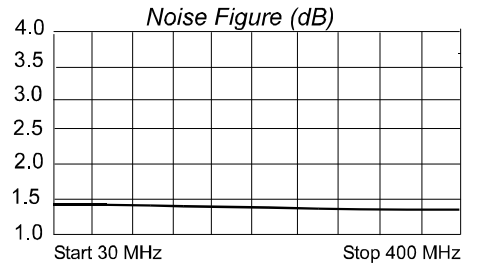
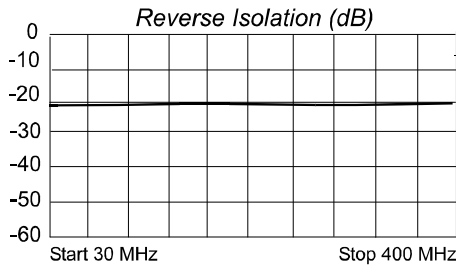
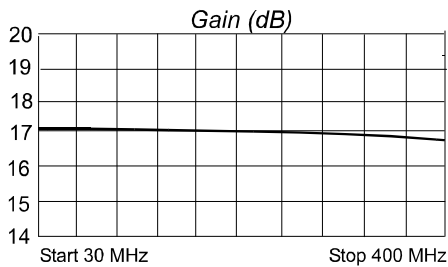
Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature -55 °C to +125 °C
 Storage Temperature -65 °C to +150 °C
 Case Temperature +125 °C
 DC Voltage +20 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: Specifications are guaranteed when tested in a 50 Ohm system.
 Specifications indicated as typical are not guaranteed.

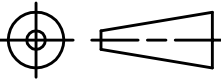
Typical Performance Data

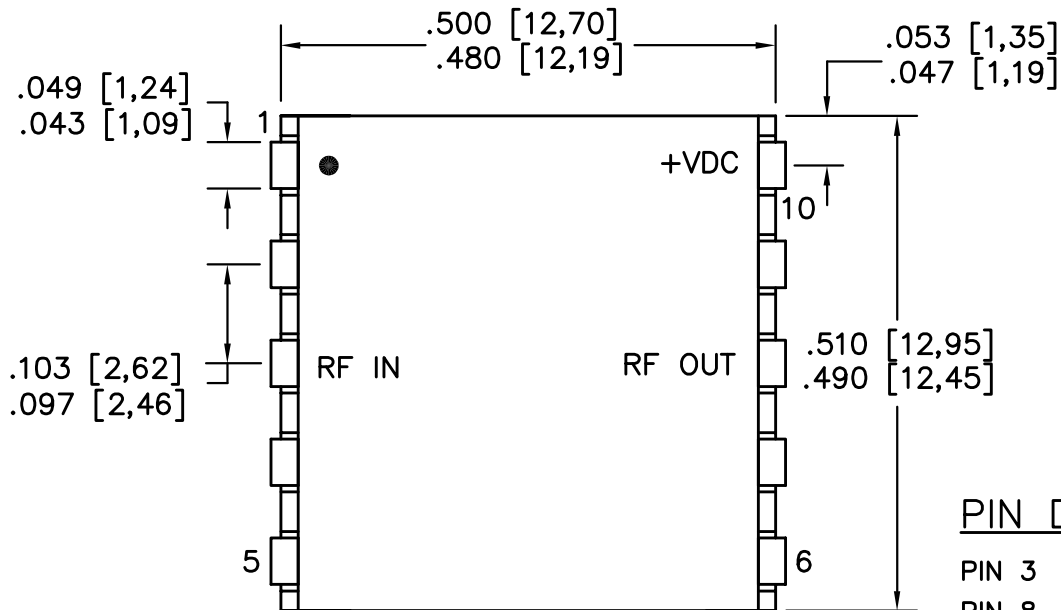


Legend ——— +25 °C



NOTES: UNLESS OTHERWISE SPECIFIED,

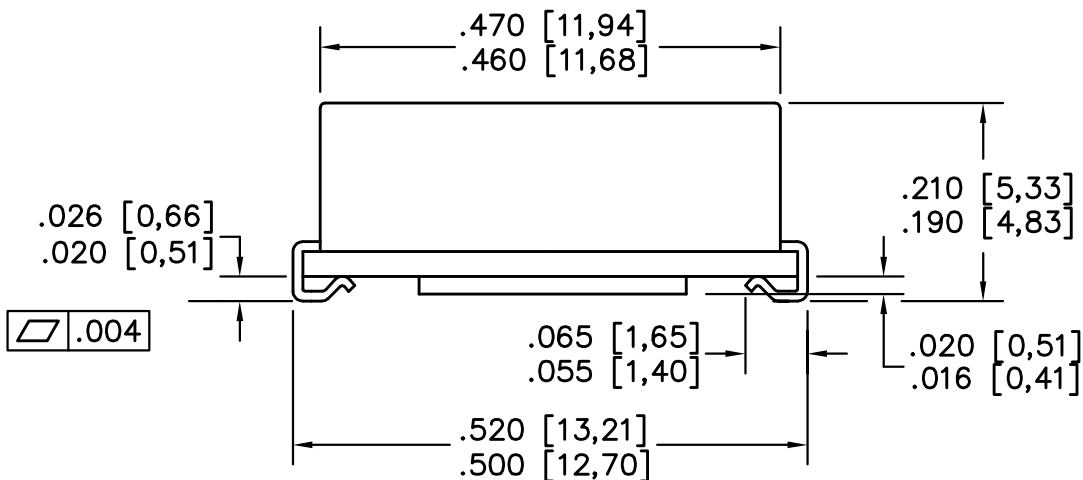
1. INTERPRET DWG PER ASME Y14.100.
2. INTERPRET THIRD ANGLE PROJECTION  (ISO-A).
3. DIMENSIONS ARE IN INCHES [MM].
4. INTERPRET DIMENSIONING SYMBOLS PER ASME Y14.5M.
5. DO NOT SCALE THIS DRAWING.
6. ALL PRINTED PATTERN TOLERANCES: $\pm .001$.
7. ALL DRILLED FEATURES: $\pm .002$.



PIN DESIGNATIONS:

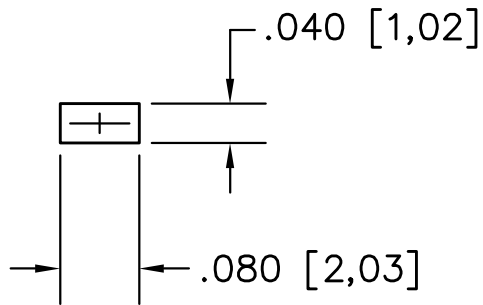
PIN 3 RF INPUT
 PIN 8 RF OUTPUT
 PIN 10 DC VOLTAGE
 ALL OTHERS GROUND

TOP VIEW

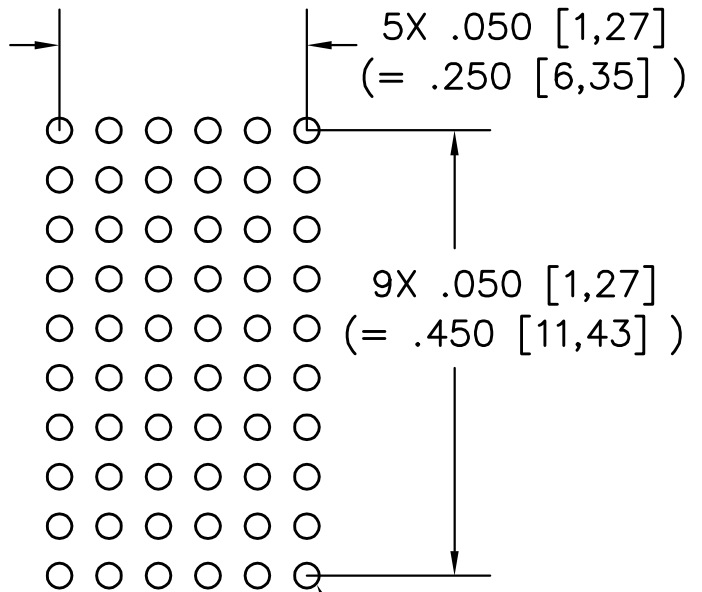


FRONT VIEW

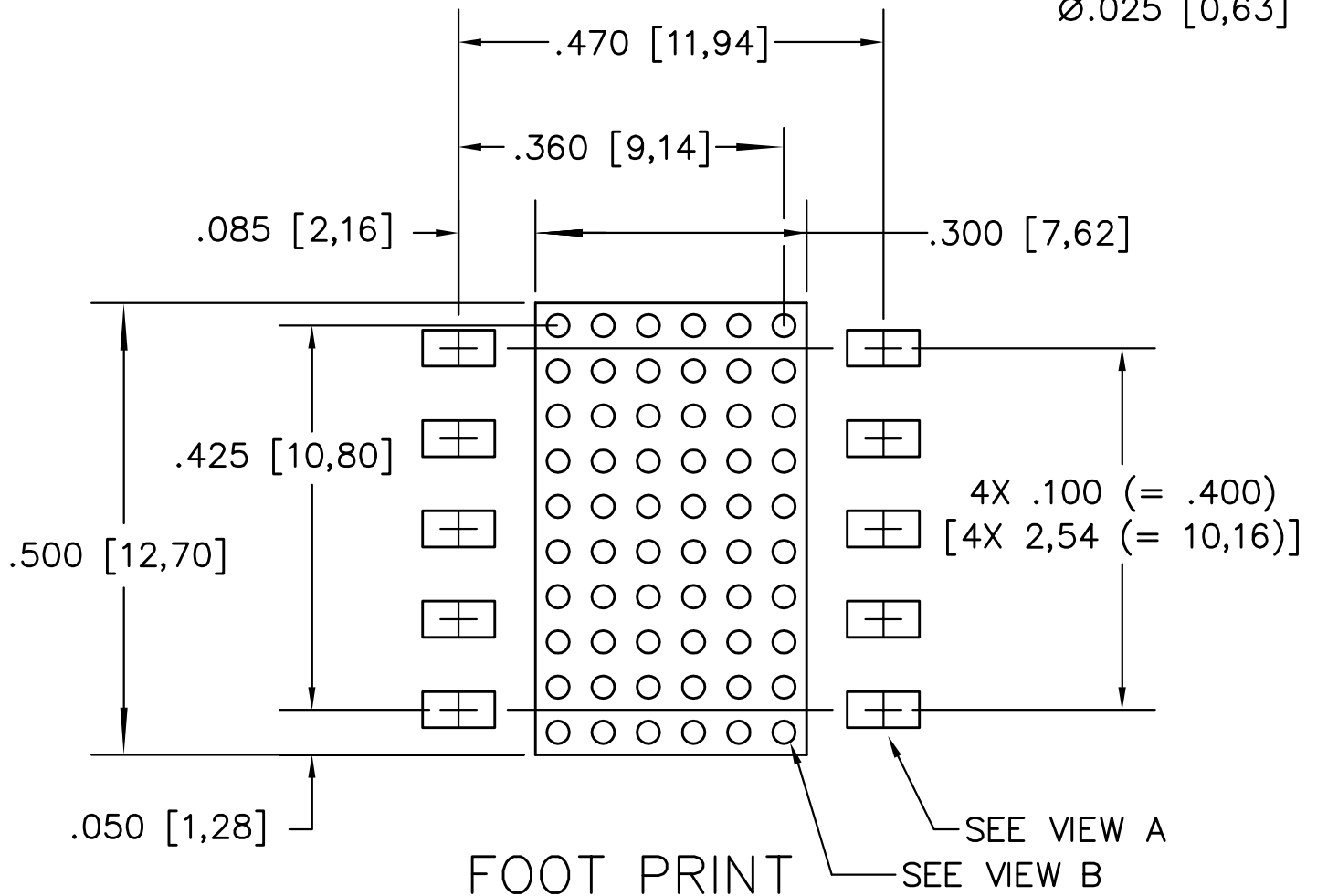
SPECTRUM MICROWAVE, INC TITLE OUTLINE DRAWING	SIZE A	CAGE CODE 55027	DWG NO. 080-10117-0001
	SCALE: 5/1	REV F.2	SHEET 2 OF 3



VIEW A
10 PLACES



VIEW B



FOOT PRINT

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	SCALE: 5/1	REV F.2	SHEET 3	OF 3	