

RF AMPLIFIER

Available as: QBH-8749, 0.500" Sq. Surface-mount (E52-19422)

MODEL QBH-8749

Features

- High Gain: 22 dB Typical
- High Power: +26 dBm Typical
- Operating Temp. -40 °C to +70 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

- Second Order Harmonic Intercept Point.....+60 dBm (Typ.)
- Second Order Two Tone Intercept Point.....+57 dBm (Typ.)
- Third Order Two Tone Intercept Point.....+40 dBm (Typ.)

Specifications

CHARACTERISTIC		TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +70 °C
Frequency		10 - 200 MHz	10 - 200 MHz
Gain (dB)		22 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.
	Out	1.6:1	2.0:1 Max.
1 dB Compression (dBm)		+26	+24 Min.
Noise Figure (dB)		3.5	4.0 Max.
Power	Vdc	+12	+12
	mA	150	170 Max.

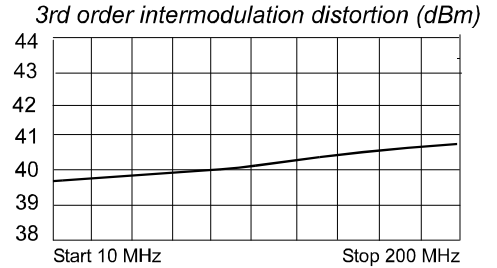
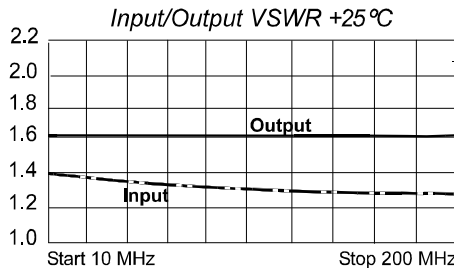
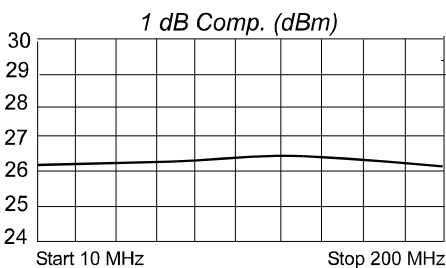
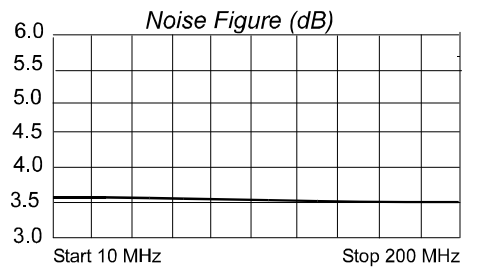
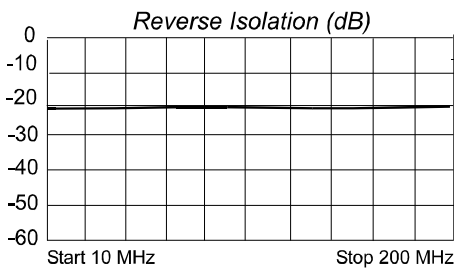
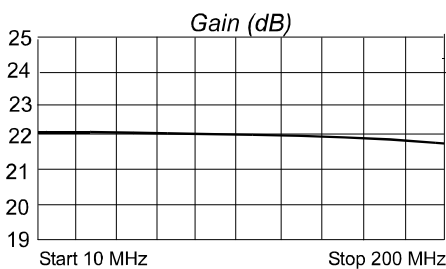


Note: Specifications are guaranteed when tested in a 50 Ohm system.
Specifications indicated as typical are not guaranteed.
Revision 9/30/2013

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 +15 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.)

Typical Performance Data



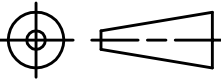
Legend ——— +25 °C

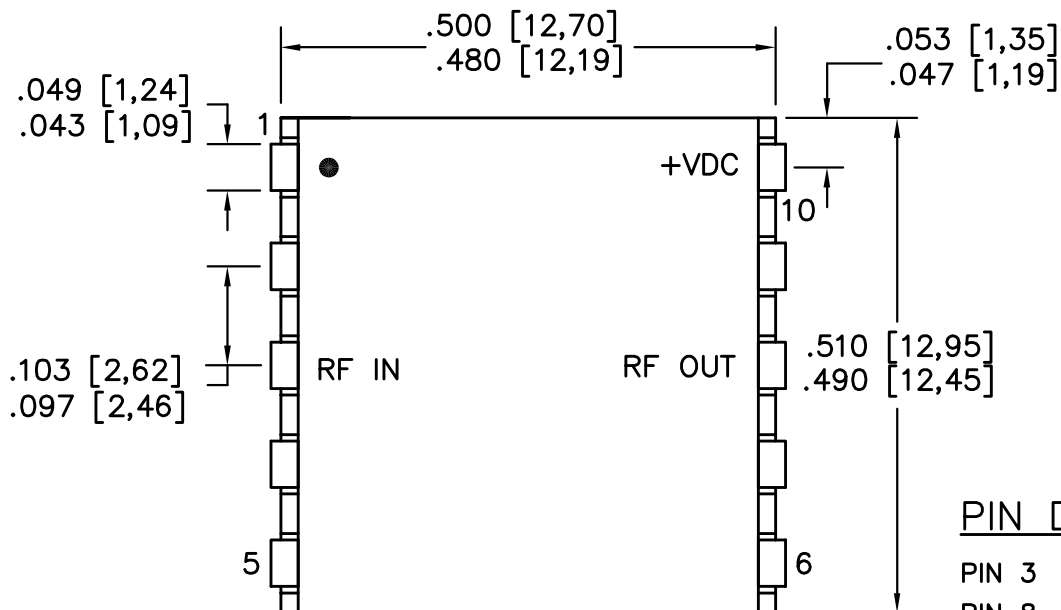


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NOTES: UNLESS OTHERWISE SPECIFIED,

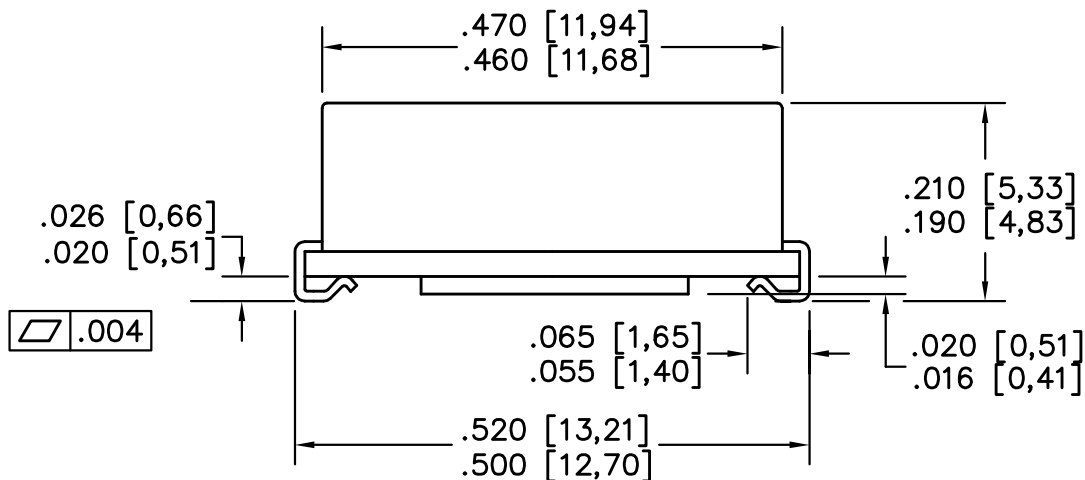
1. INTERPRET DWG PER ASME Y14.100.
2. INTERPRET THIRD ANGLE PROJECTION  (ISO-A).
3. DIMENSIONS ARE IN INCHES [MM].
4. INTERPRET DIMENSIONING SYMBOLS PER ASME Y14.5M.
5. DO NOT SCALE THIS DRAWING.
6. ALL PRINTED PATTERN TOLERANCES: $\pm .001$.
7. ALL DRILLED FEATURES: $\pm .002$.



PIN DESIGNATIONS:

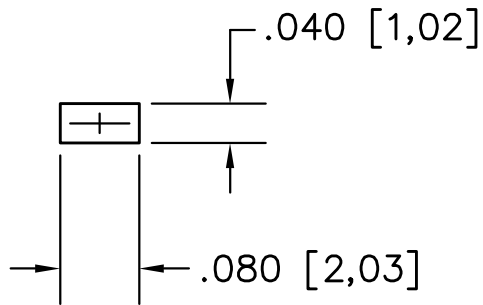
- PIN 3 RF INPUT
- PIN 8 RF OUTPUT
- PIN 10 DC VOLTAGE
- ALL OTHERS GROUND

TOP VIEW

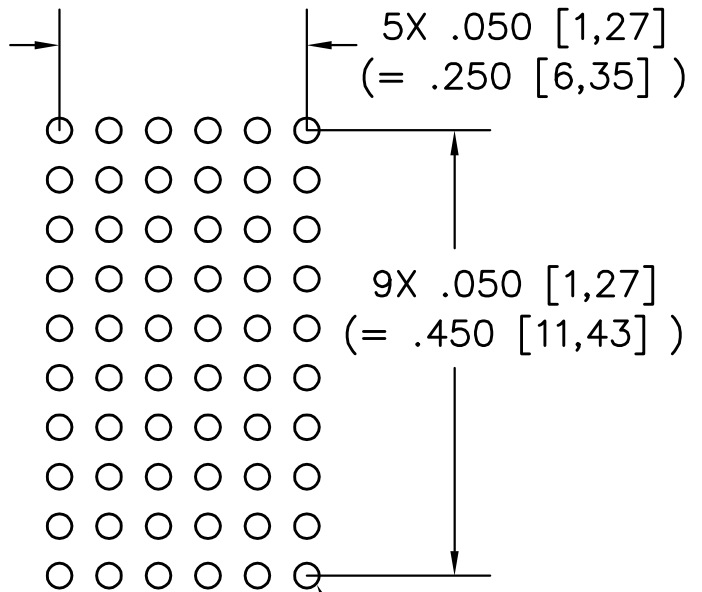


FRONT VIEW

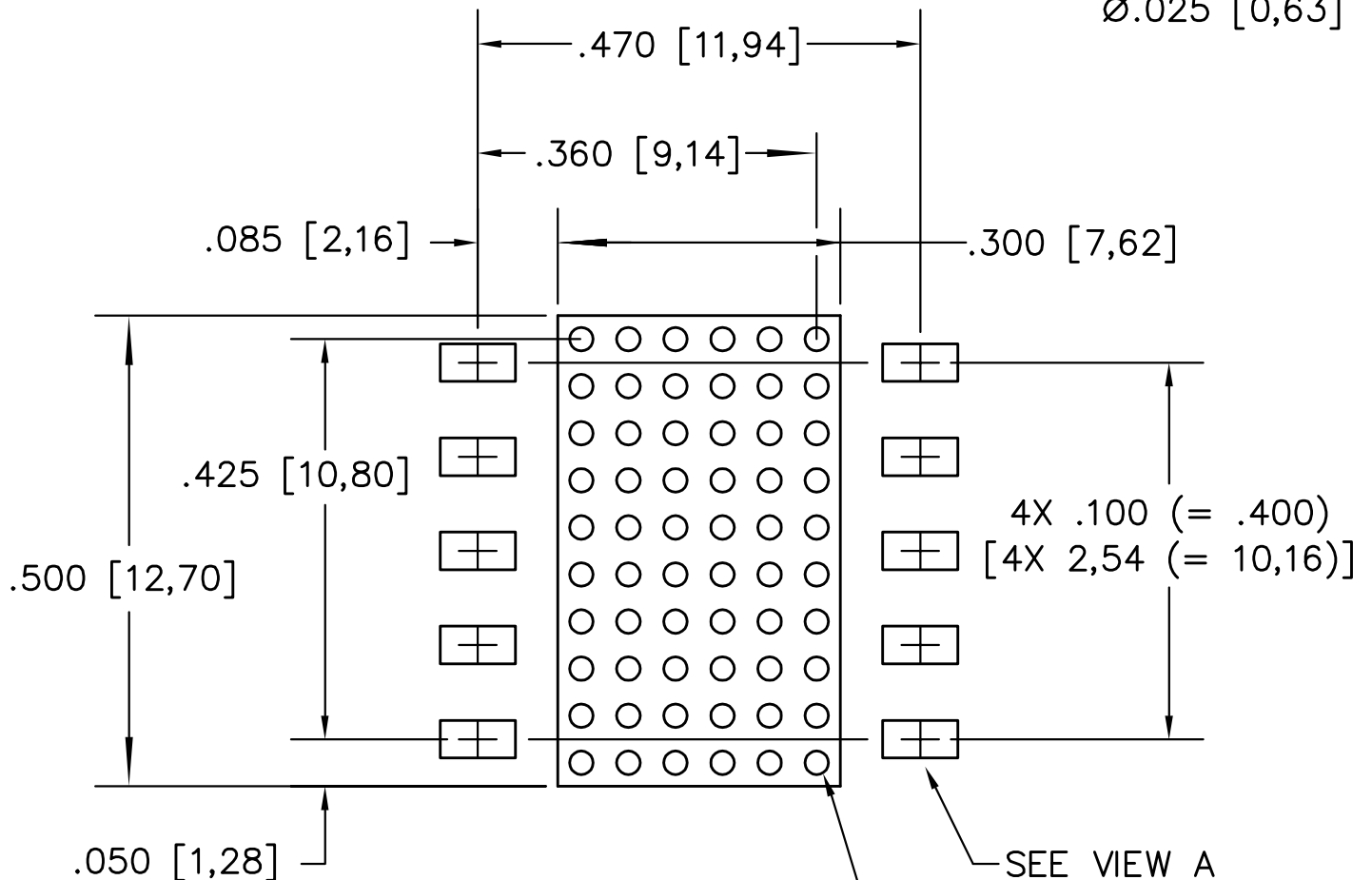
SPECTRUM MICROWAVE, INC	SIZE	CAGE CODE	DWG NO.
	A	55027	080-10117-0001
TITLE	SCALE:	REV	SHEET
OUTLINE DRAWING	5/1	F.2	2 OF 3



VIEW A
10 PLACES



VIEW B



FOOT PRINT

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