

RF/Microwave Amplifier



Features

- No Additional Circuitry Needed, Internal Blocking Caps Included
- Superior Phase Noise Performance
- Unconditionally Stable
- Modifications Available at No Additional Charge
- Environmental Screening Available

Technical Specifications

Parameter	Typical	Min/Max
Frequency Range	3000 MHz – 5000 MHz	3000 MHz - 5000 MHz
Gain	10 dB	8.5 dB
Noise Figure	3.5 dB	5.0 dB
Output Power @ 1 dB Compression	+26 dBm	+25 dBm
Output 3 rd Order Intercept	+40 dBm	---
Output 2 nd Order Intercept	+50 dBm	---
Reverse Isolation	20 dB	---
Input VSWR	1.5:1	2.0:1
Output VSWR	1.5:1	2.0:1
Supply Voltage	15 volts	15 volts
Supply Current	175 mA	185 mA

Maximum Ratings

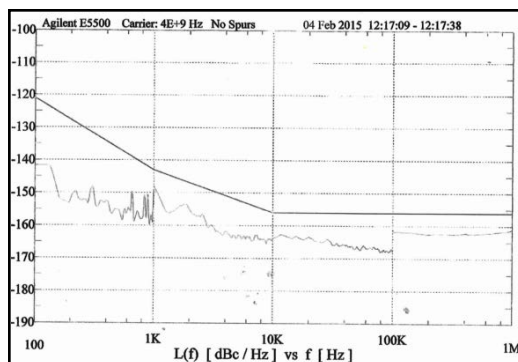
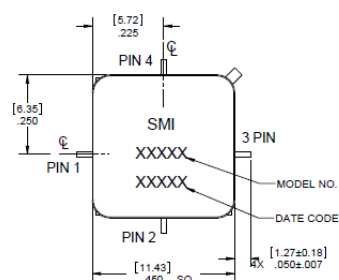
Maximum (No Damage) Ratings	
Storage Temperature	-62°C to +125°C
Operating Temperature	-55°C to +125°C
Case Temperature	+125°C
DC Voltage @ 25°C	+ 18 volts
Continuous RF Input Power	+ 15 dBm
Short Term RF Input Power	50 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.1 Watt (3 µsec Max.)

* Typical values are measured at 25°C, but not guaranteed.

Outline Drawing

(For reference only)

(TN3123PM)



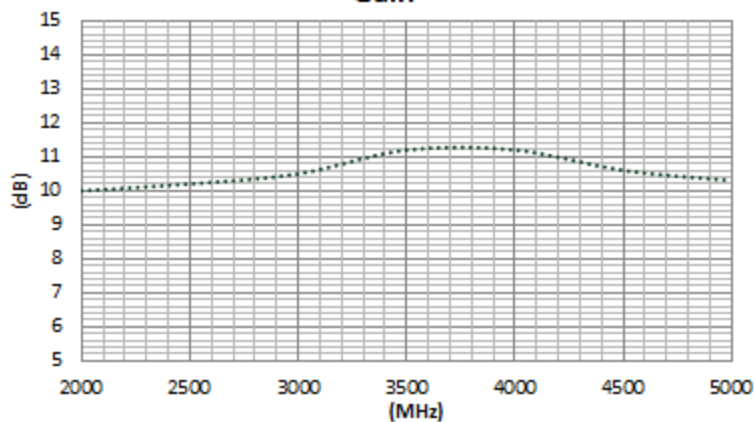
Guaranteed Phase Noise (4000 MHz) Performance (dBc/Hz) at 25C

Frequency (Offset)	Typical	Guaranteed
100 Hz	-140	-135
1 kHz	-150	-145
10 kHz	-165	-160
100 kHz	-165	-160
1 MHz	-165	-160

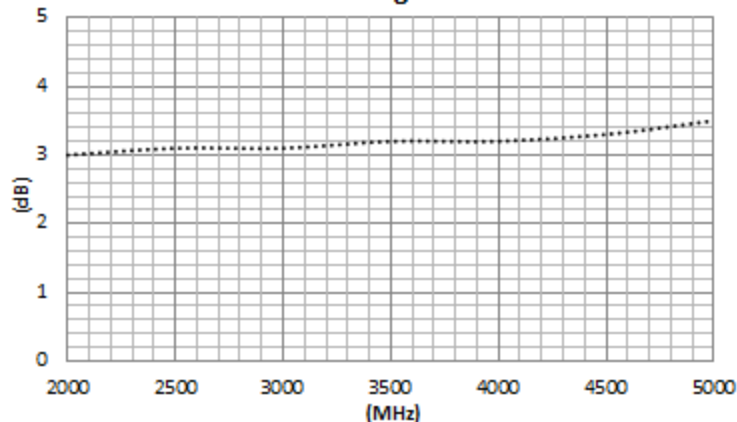
Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.

Typical Performance Graphs

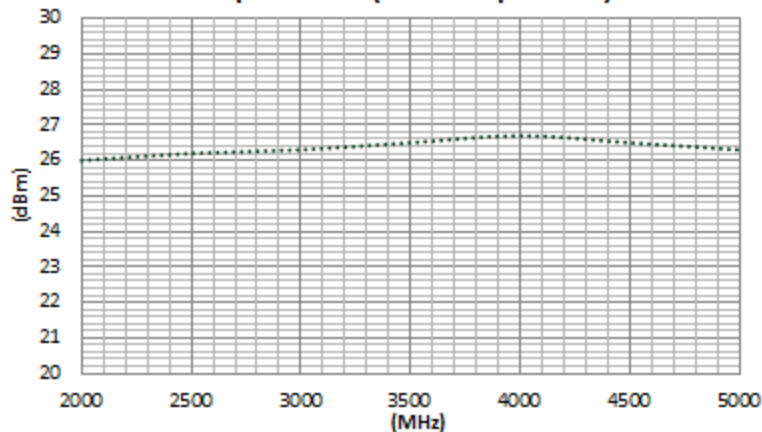
Gain



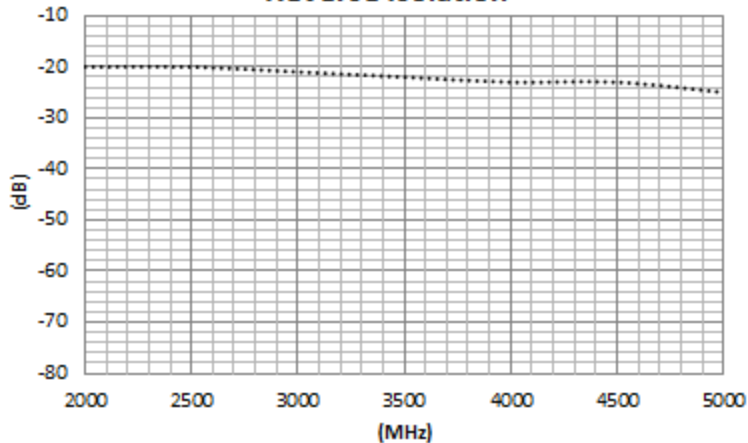
Noise Figure



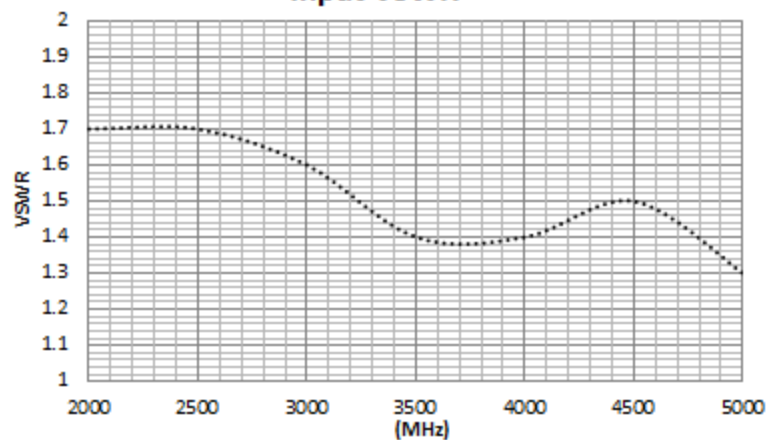
Output Power (1 dB Compression)



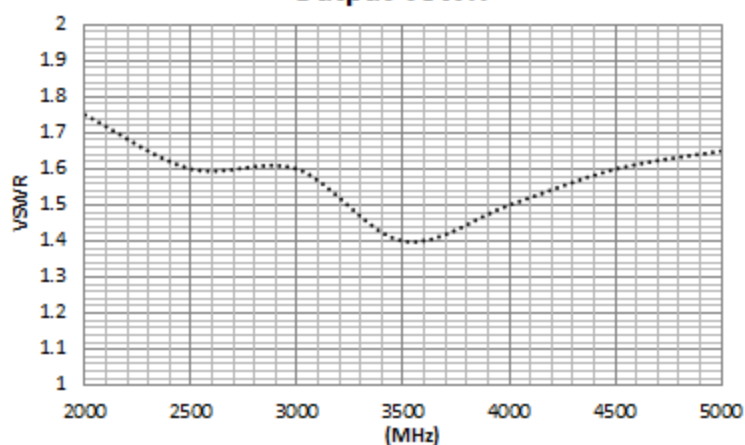
Reverse Isolation



Input VSWR



Output VSWR

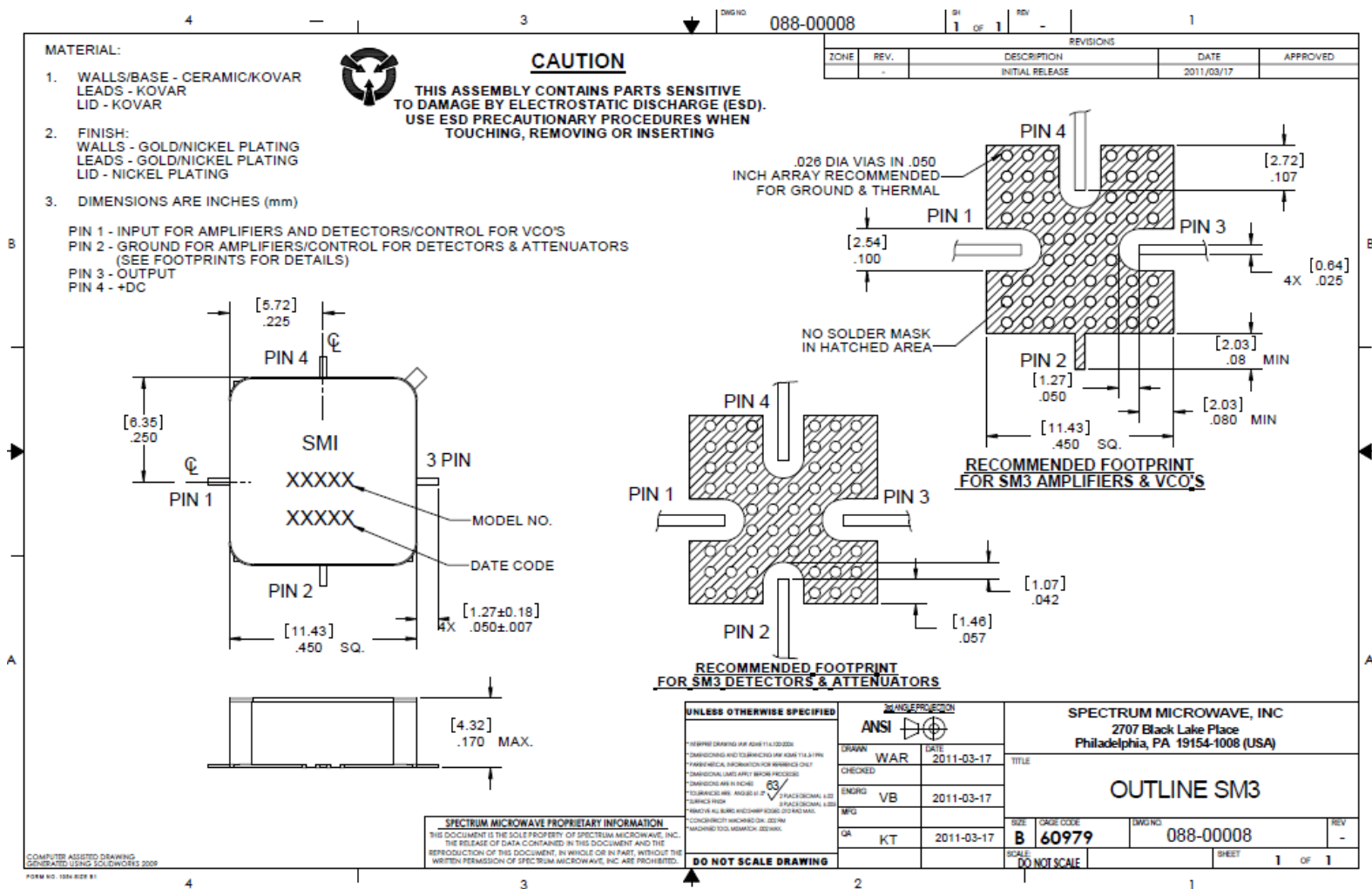


Instructions

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ELECTRONIC GRADE

