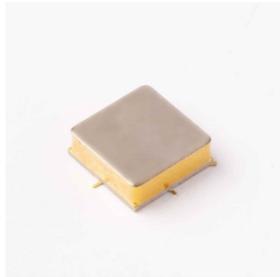


RF/Microwave Amplifier



Features

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

Technical Specifications

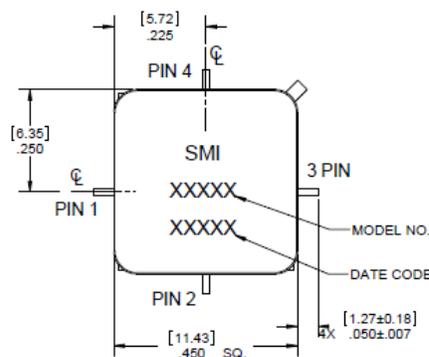
Parameter	Typical	Min/Max
Frequency Range	2500 MHz – 4500 MHz	2500 MHz - 4500 MHz
Gain	10 dB	8 dB
Noise Figure	2.75 dB	4 dB
Output Power @ 1 dB Compression	+19 dBm	+17 dBm
Output 3 rd Order Intercept	+30 dBm	---
Output 2 nd Order Intercept	+40 dBm	---
Reverse Isolation	24 dB	---
Input VSWR	1.5:1	2.0:1
Output VSWR	1.5:1	2.0:1
Supply Voltage	15 volts	15 volts
Supply Current	75 mA	100 mA

Absolute 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	+ 13 dBm
Short Term RF Input Power	50 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.2 Watt (3 µsec Max.)

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

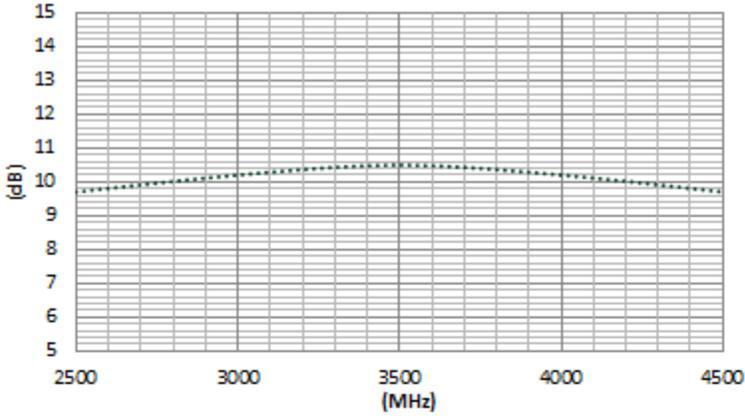
Outline Drawing (For reference only)



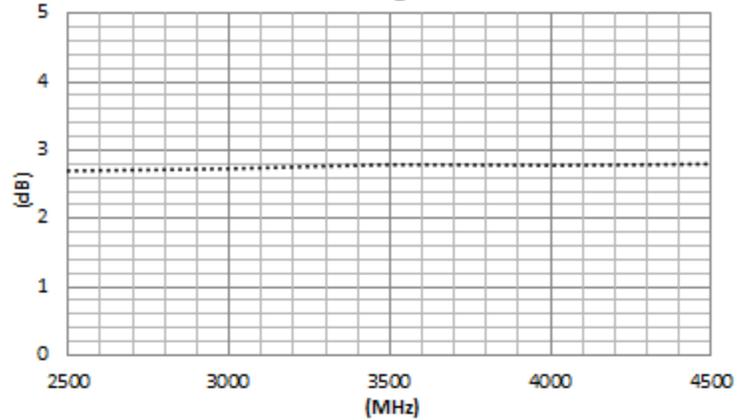
Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm)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

Typical Performance Graphs

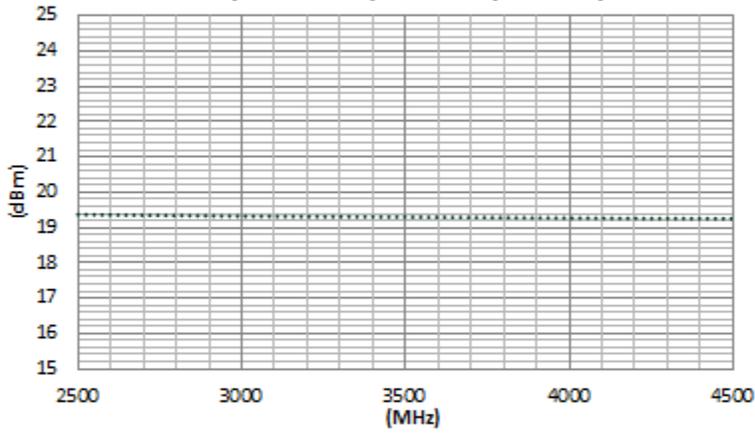
Gain



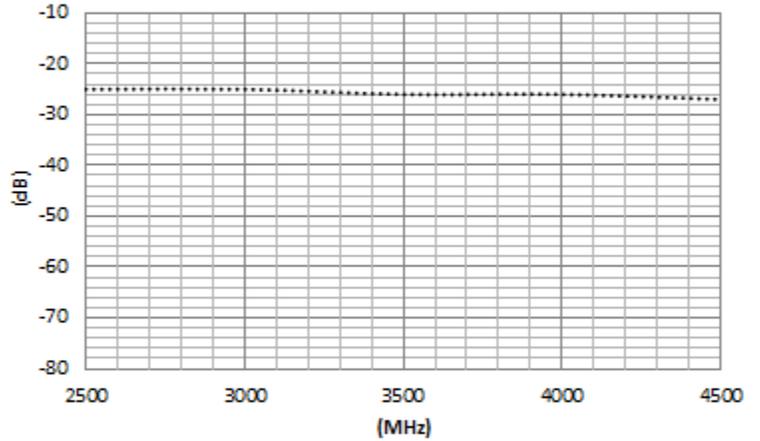
Noise Figure



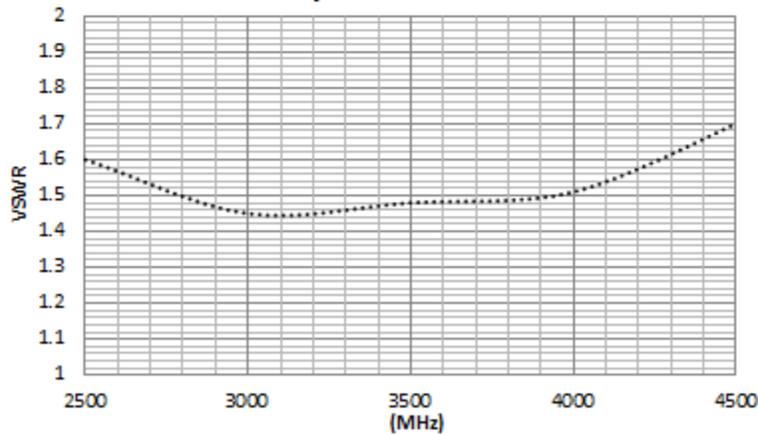
Output Power (1 dB Compression)



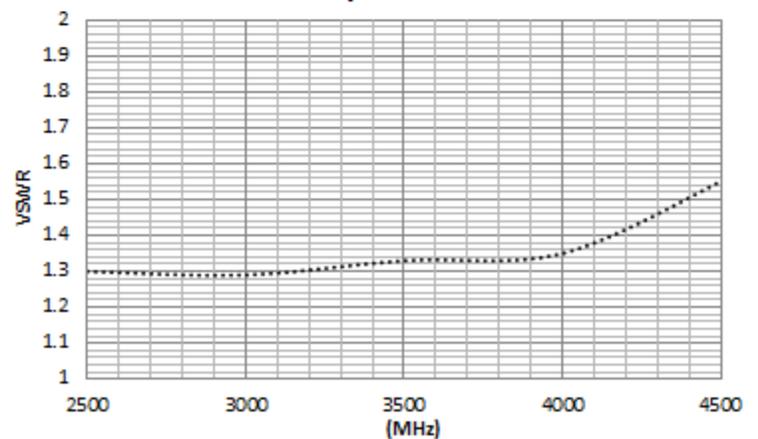
Reverse Isolation



Input VSWR



Output VSWR



Instructions

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

(For reference only)

MATERIAL:

- WALLS/BASE - CERAMIC/KOVAR
LEADS - KOVAR
LID - KOVAR
- FINISH:
WALLS - GOLD/NICKEL PLATING
LEADS - GOLD/NICKEL PLATING
LID - NICKEL PLATING
- DIMENSIONS ARE INCHES (mm)

PIN 1 - INPUT FOR AMPLIFIERS AND DETECTORS/CONTROL FOR VCO'S
PIN 2 - GROUND FOR AMPLIFIERS/CONTROL FOR DETECTORS & ATTENUATORS
(SEE FOOTPRINTS FOR DETAILS)
PIN 3 - OUTPUT
PIN 4 - +DC

CAUTION

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

.026 DIA VIAS IN .050 INCH ARRAY RECOMMENDED FOR GROUND & THERMAL

NO SOLDER MASK IN HATCHED AREA

RECOMMENDED FOOTPRINT FOR SM3 AMPLIFIERS & VCO'S

RECOMMENDED FOOTPRINT FOR SM3 DETECTORS & ATTENUATORS

ZONE		REV.	DESCRIPTION	DATE	APPROVED
		-	INITIAL RELEASE	2011/03/17	

UNLESS OTHERWISE SPECIFIED		ANSI		SPECTRUM MICROWAVE, INC	
DRAWN	WAR	DATE	2011-03-17	2707 Black Lake Place Philadelphia, PA 19154-1008 (USA)	
CHECKED				OUTLINE SM3	
ENGRG	VB	DATE	2011-03-17		
MFG					
QA	KT	DATE	2011-03-17	SIZE	GRADE CODE
				B	60979
				DWG NO	088-00008
				SCALE	DO NOT SCALE
				SHEET	1 OF 1

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