

**Available as:**

TM3129, 4 Pin 0.500" TO-8 Can (T4)  
 TN3129, 4 Pin 0.450" Sq. Surface Mount (SM3)  
 BX3129, SMA Connectorized Housing (H1)



# RF/Microwave Amplifier



## Features

- Low Noise Figure : 1.1 dB
- No External Circuitry Needed
- RoHS Compliant Model Available
- Unconditionally Stable
- EAR99

## Technical Specifications

Characteristic	TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency	1000 – 1500 MHz	1000 – 1500 MHz
Gain (dB)	32.5	31 Min.
Power @ 1 dB Comp. (dBm)	+20	+18.5 Min.
Reverse Isolation (dB)	-40	--
VSWR	In	1.5:1
	Out	1.5:1
Noise Figure (dB)	1.1	2.5 Max.
Power	Vdc	+5
	mA	100
		125 Max.

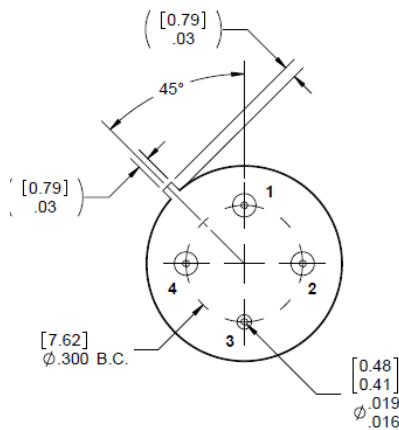
## Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+47 dBm (Typ.)
Second Order Two Tone Intercept Point:	+41 dBm (Typ.)
Third Order Two Tone Intercept Point:	+31 dBm (Typ.)

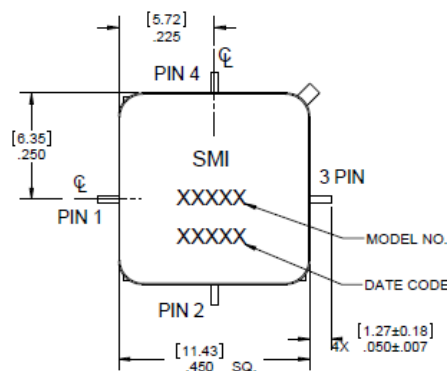
**Note:**  
**Intercept Values Measured at 1250 MHz.**  
**Absolute Maximum (No Damage) Ratings**

Operating Temperature	-55°C to +100 °C
Storage Temperature	-62°C to +125°C
Case Temperature	+125 °C
DC Voltage	+8 Volts
Continuous RF Input Power	+18 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 μsec Max.)

- 1) Care should always be taken to effectively ground the case of each unit
- 2) Typical values are measured at 25°C, but not guaranteed.
- 3) Package drawings below are for reference only.



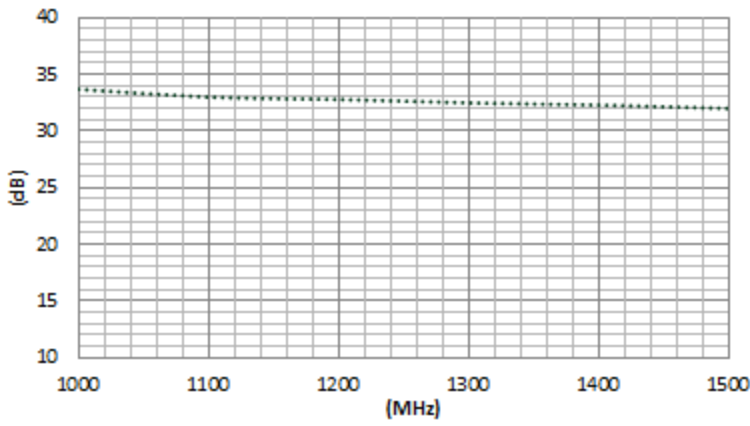
**TM3129**



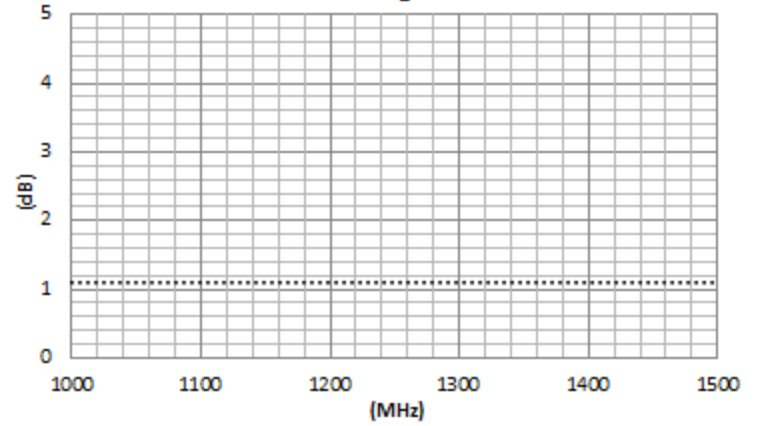
**TN3129**

Typical Performance Graphs

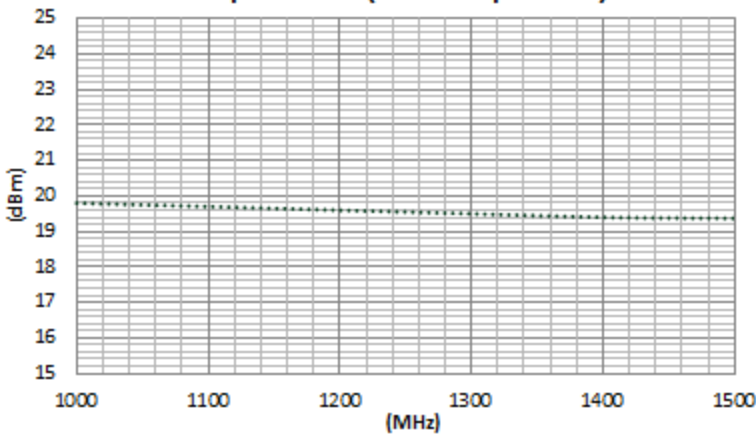
Gain



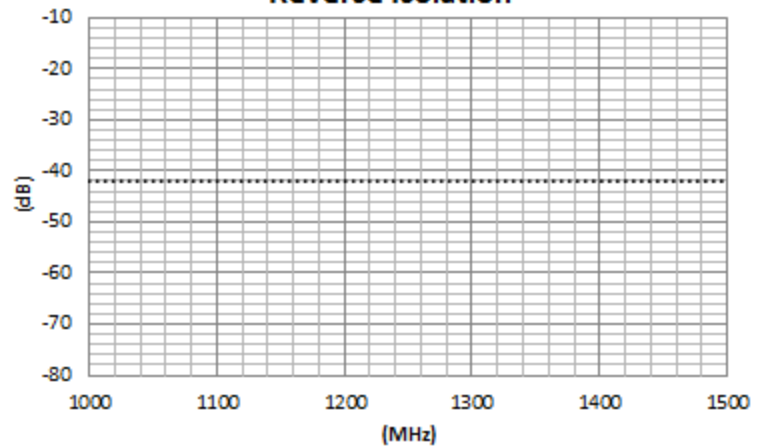
Noise Figure



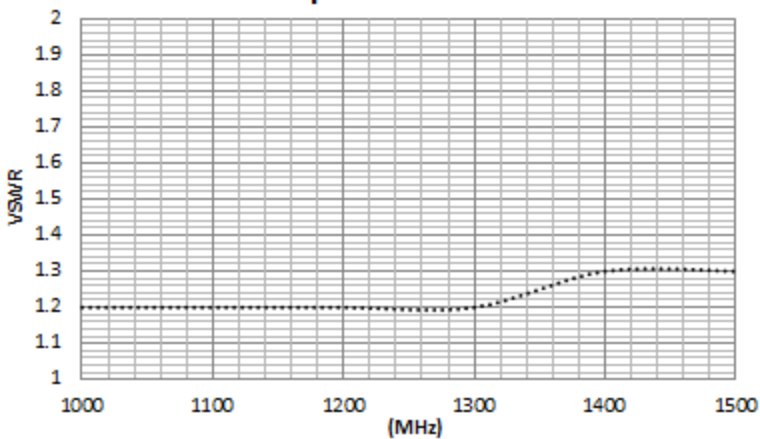
Output Power (1 dB Compression)



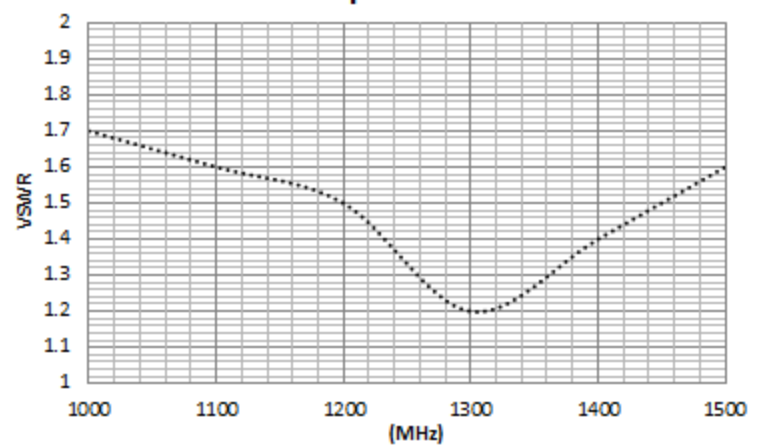
Reverse Isolation



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.	

1) Outlines drawings below are for reference only.

### NOTES:

1. HOUSING: ALUMINUM
2. FINISH: NICKEL

