

Available as:

TM3128, 4 Pin TO-8 (T4)  
 TN3128, 4 Pin 0.450" Sq. Surface Mount (SM3)  
 BX3128, SMA Connectorized Housing (H1)

## RF/Microwave Amplifier



### Features

- Low Noise Figure: 1.4 dB
- No External Circuitry Needed
- RoHS Compliant Model Available
- Unconditionally Stable

### Technical Specifications

Characteristic		TYPICAL Ta = +25 °C	MIN/MAX Ta = -55°C to +85 °C
Frequency		500 – 2500 MHz	500 – 2500 MHz
Gain (dB)		16.5	15 Min.
Power @ 1 dB Comp. (dBm)		+14.5	+13 Min.
Reverse Isolation (dB)		-20	---
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB)		1.4	2.5 Max.
Power	Vdc	+5	+5
	mA	35	50 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.

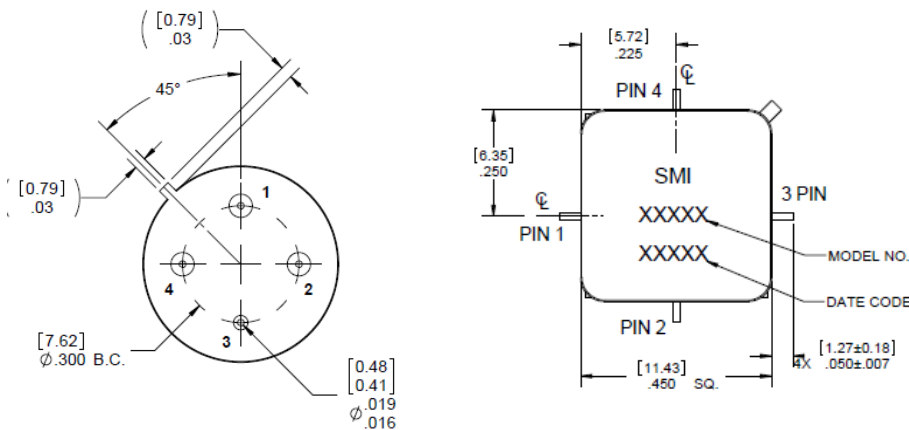
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point:	+42 dBm (Typ.)
Second Order Two Tone Intercept Point:	+37 dBm (Typ.)
Third Order Two Tone Intercept Point:	+27dBm (Typ.)

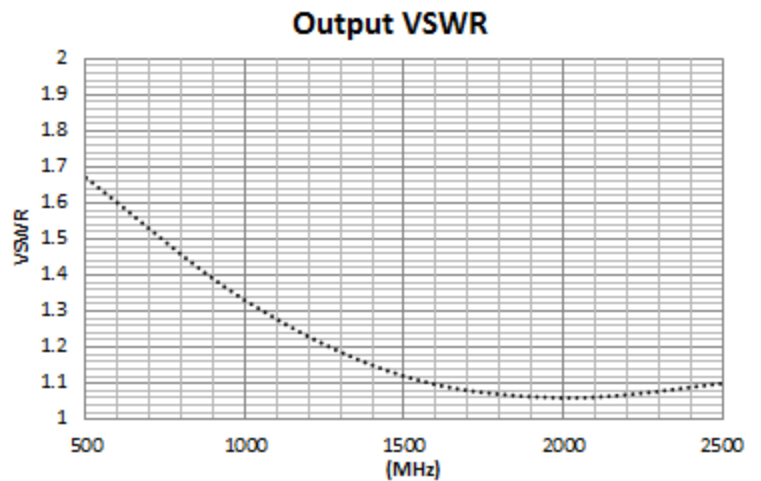
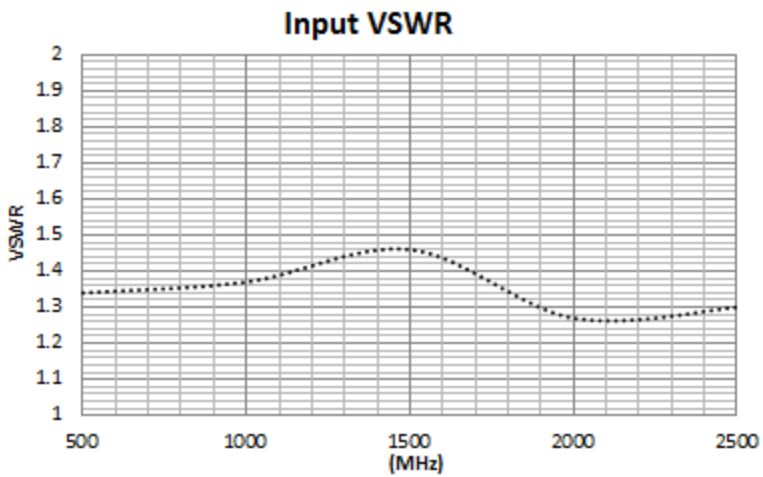
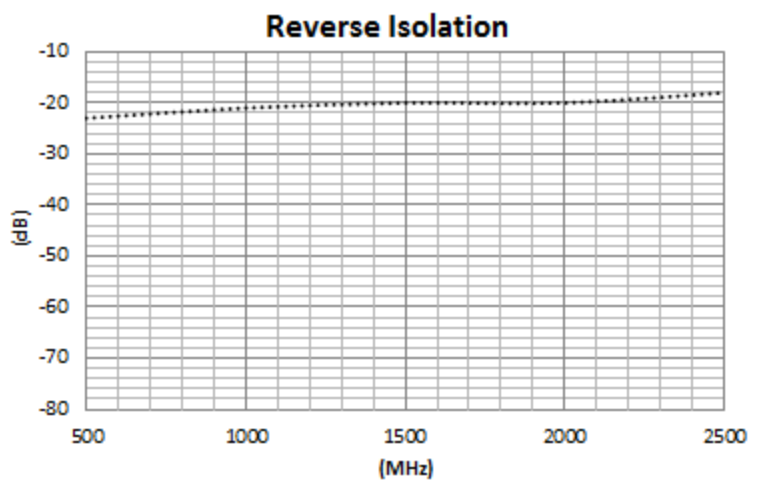
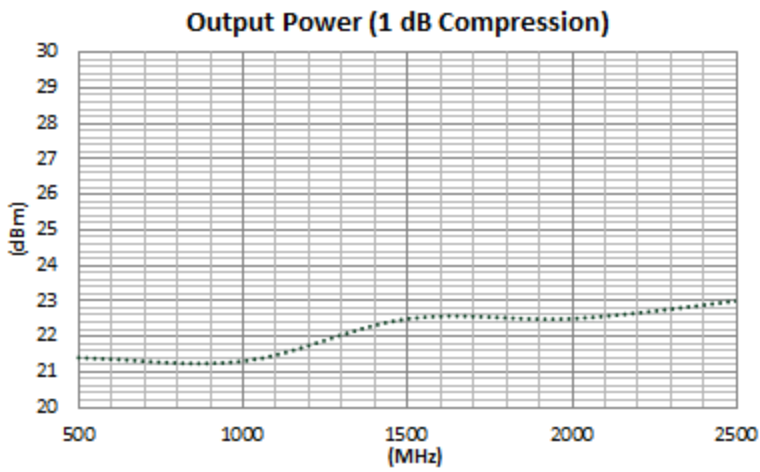
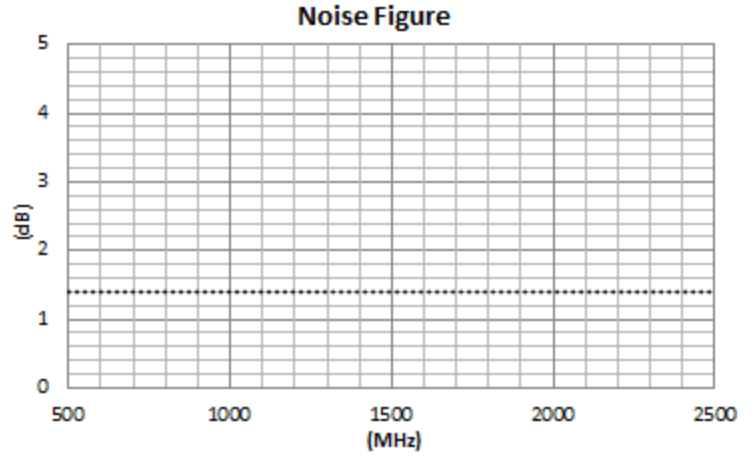
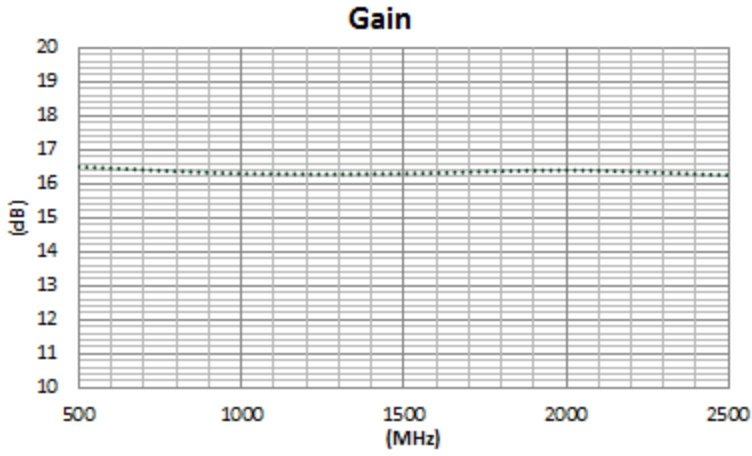
**Note:**  
Intercept Values Measured at 1500 MHz.

### 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	+13 dBm
Short Term RF Input Power	200 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 μsec Max.)



## Typical Performance Graphs



## 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

