

Available as:

TR7588, 4 Pin 0.600" dia. (TO-8B)
 RN7588, 4 Pin 0.525" Sq. Surface Mount (SM19)
 BR7588, SMA Connectorized Laser Seal Housing (H2L)

RF/Microwave Amplifier



Features

- **High Power: 25 dBm Typical**
- **No External Circuitry Needed**
- **RoHS Compliant Model Available**
- **Unconditionally Stable by design**

Technical Specifications

Characteristic	TYPICAL Ta = +25°C	MIN/MAX Ta = -55°C to +85°C
Frequency	20 – 2600 MHz	50 – 2500 MHz
Gain (dB)	19	17 Min.
Gain Flatness (dB)	+/- 0.3	+/- 1.0
Power @ 1 dB Comp. (dBm)	+25	+23.5 Min.
Reverse Isolation (dB)	-36	--
VSWR	In	1.5:1
	Out	1.5:1
Noise Figure (dB)*	5.0	6.5 Max.
Power	Vdc	+8
	mA	250
		265 Max.

Typical Intermodulation* Performance at 25°C

Second Order Harmonic Intercept Point:	+64 dBm (Typ.)
Second Order Two Tone Intercept Point:	+58 dBm (Typ.)
Third Order Two Tone Intercept Point:	+38 dBm (Typ.)

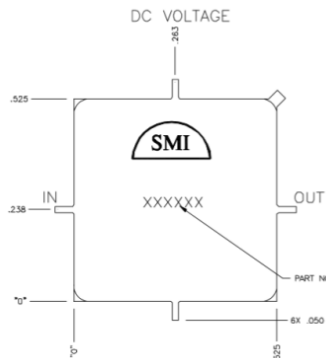
*Note: Measured at Midband.

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	+10 Volts
Continuous RF Input Power	+17 dBm
Short Term RF Input Power	100 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

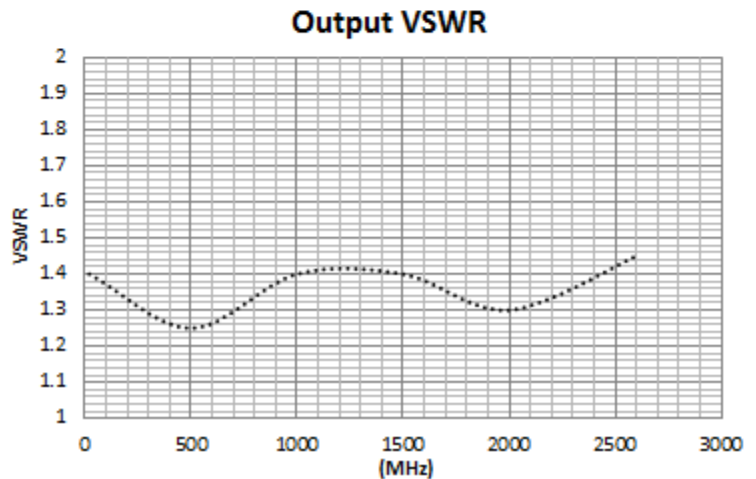
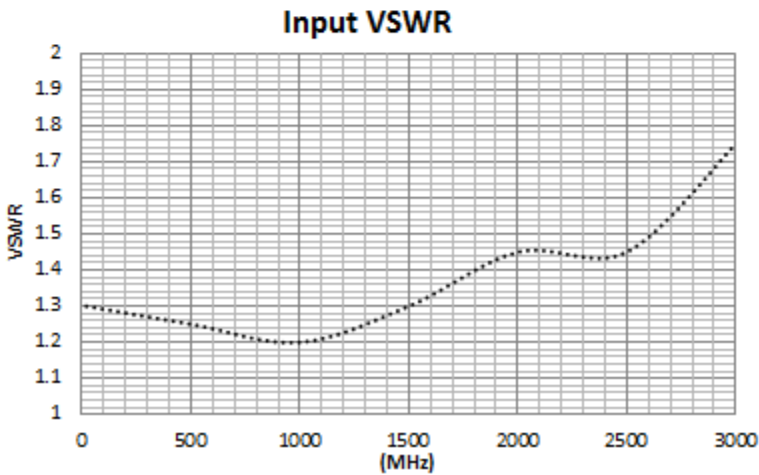
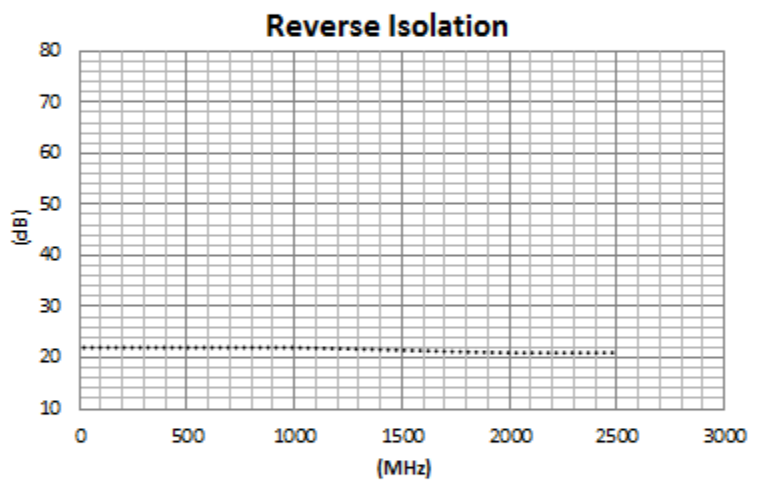
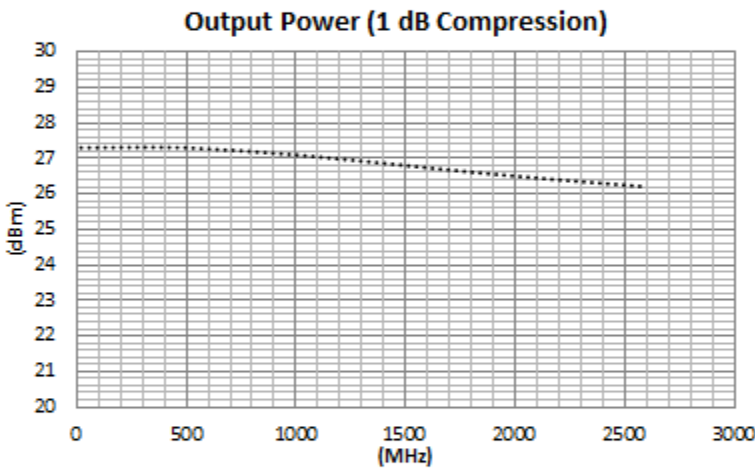
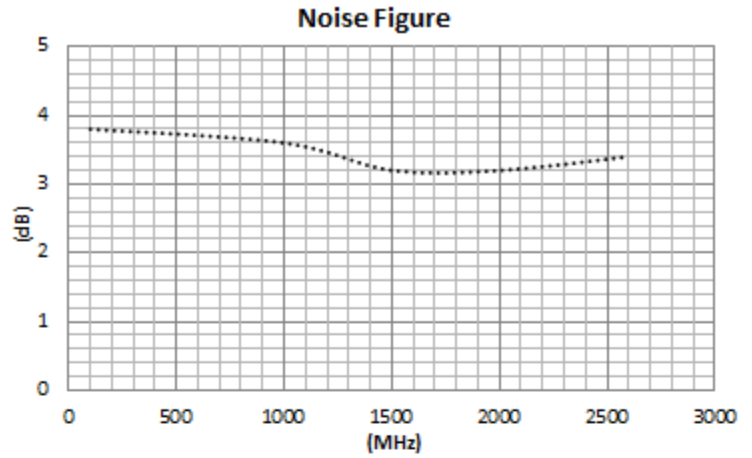
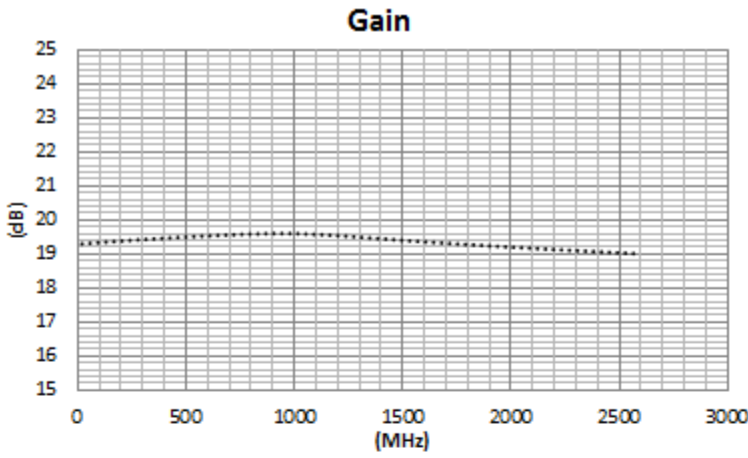
*N.F. specification is from 100 to 2500 MHz

1) Drawing to the right illustrates model number RN7588



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.	

Typical Performance Graphs



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