Model # TR6538

Available as:
TR6538, 4 Pin 0.600” TO-8B (T8)
RN6538, 4 Pin 0.525” Sq. Surface Mount (SM19)
BR6538, SMA Connectorized Housing (H2)

Standard RF/Microwave Amplifier

Features

- **No External Circuitry Needed**
- **RoHS Compliant Model Available**
- **Unconditionally Stable**

Technical Specifications

Characteristic		TYPICAL Ta = +25 ºC	MIN/MAX Ta = -55ºC to +85 ºC
Frequency		20 MHz – 2600 MHz	20 MHz – 2500 MHz
Gain (dB)		21	19.5 Min.
Power @ 1 dB Comp. (dBm)		+26	+24 Min.
Reverse Isolation (dB)		37	---
VSWR	In	1.5:1	2.0:1 Max.
	Out	1.5:1	2.0:1 Max.
Noise Figure (dB) (100 MHz-2500 MHz)		3.5	4.5 Max.
Power	Vdc	15	15
	mA	190	200 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 ºC

Second Order Harmonic Output Intercept Point:	+58 dBm (Typ.)
Second Order Two Tone Output Intercept Point:	+52 dBm (Typ.)
Third Order Two Tone Output Intercept Point:	+39 dBm (Typ.)

Note: Intercept Values Measured at 1000 MHz.

Absolute Maximum (No Damage) Ratings

Operating Temperature	-55ºC to +100 ºC
Storage Temperature	-62ºC to +125ºC
DC Voltage	+17 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	100 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

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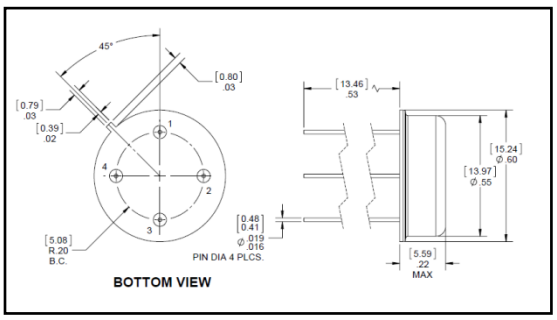
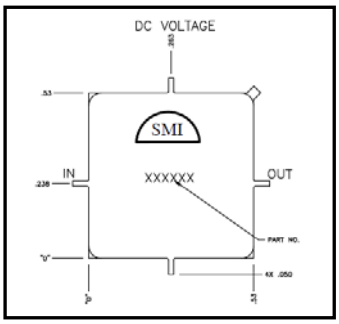


Model RN6538



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 below for reference only