

RF AMPLIFIER

MODEL *TM3031*

Available as: TM3031, 4 Pin TO-8 (T4)
 TN3031, 4 Pin Surface Mount (SM3)
 FP3031, 4 Pin Flatpack (FP4)
 BX3031, Connectorized Housing (H1)

Features

- n Low 3.3 Volt Operation
- n Low Noise Figure: <2.2 dB Typical
- n Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -10 °C to +60 °C
Frequency	100 - 500 MHz	100 - 500 MHz
Gain (dB)	13	12.5 Min.
Power @ 1 dB Comp. (dBm)	+8.5	+7.0 Min.
Reverse Isolation (dB)	-19	-18.0 Max.
VSWR In	<1.85:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<2.2	2.5 Max.
VSWR Vdc	+3.3	+3.3 Min.
mA	19.2	20 Max.

Note: Care should always be taken to effectively ground the case of each unit.

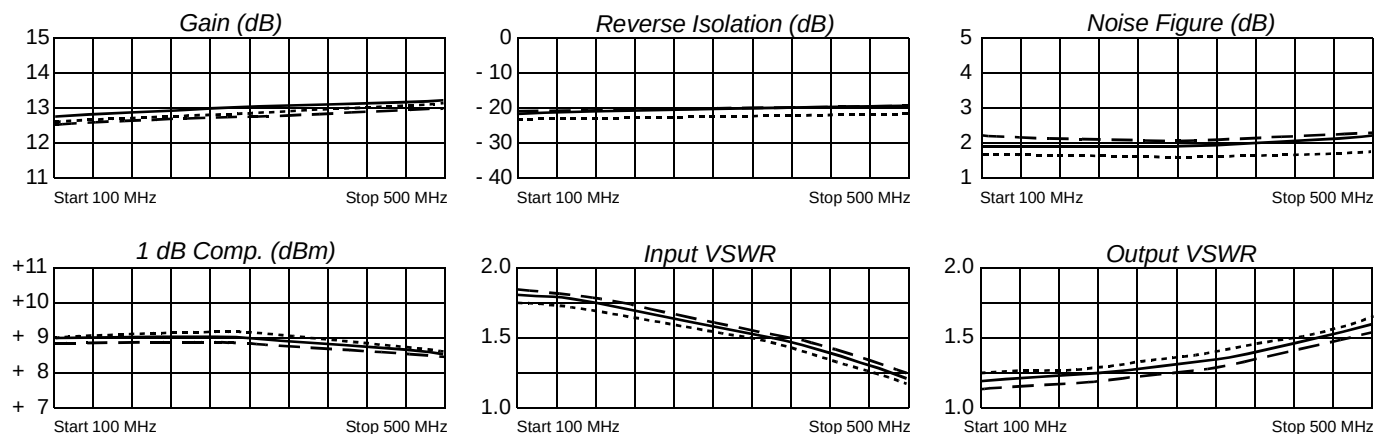
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +35 dBm (Typ.)
 Second Order Two Tone Intercept Point +29 dBm (Typ.)
 Third Order Two Tone Intercept Point +20 dBm (Typ.)

Maximum Ratings

Ambient 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 + 6 dBm
 Short Term RF Input Power 20 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.1 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - - + 60 °C -10 °C



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 05/13/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001