

RF AMPLIFIER

MODEL TR3029

Available as: TR3029, 4 Pin TO8B (T8)
WN3029, 10 Lead Gull-Wing (SG4)
BR3029, Connectorized Housing (H2)

Features

- Low Noise Figure: 1.8 dB Typical
- High Third Order Intercept: +27 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Units are Unconditionally Stable

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	100 - 500 MHz	100 - 500 MHz
Gain (dB)	26	24 Min.
Power @ 1 dB Comp. (dBm)	+16	+14 Min.
Reverse Isolation (dB)	-32	-30 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	1.8	2.5 Max.
Power Vdc	+15	+15
mA	48	52 Max.

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

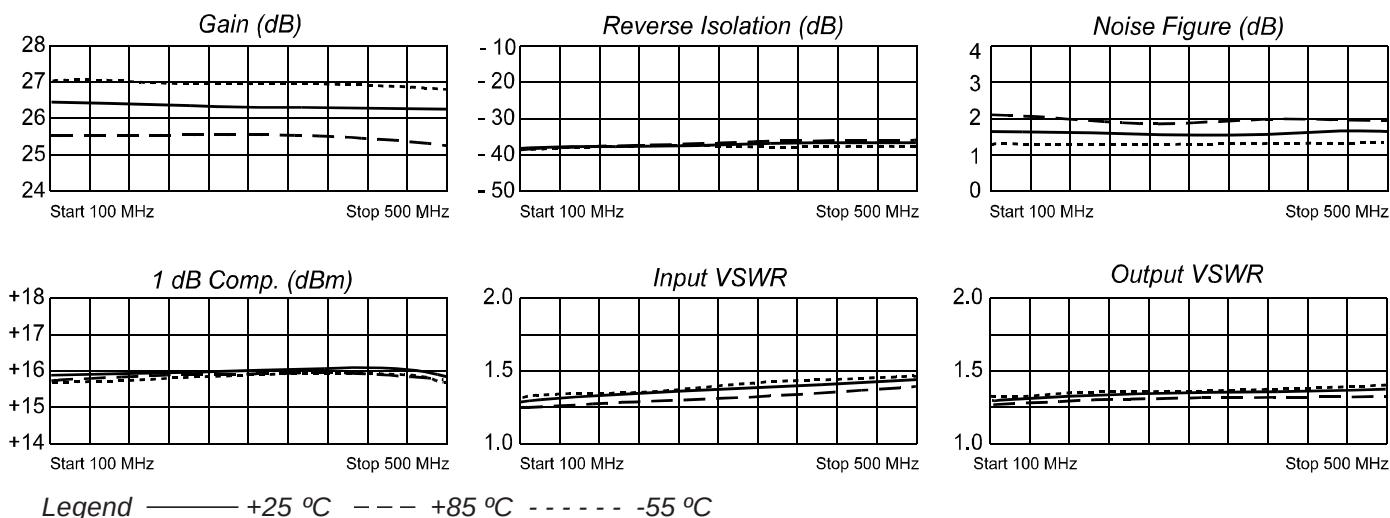
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +43 dBm (Typ.)
Second Order Two Tone Intercept Point +35 dBm (Typ.)
Third Order Two Tone Intercept Point +27 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 +18 Volts
Continuous RF Input Power +13 dBm
Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
Maximum Peak Power 0.2 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	--- S11 --- Mag Deg	--- S21 --- Mag Deg	--- S12 --- Mag Deg	--- S22 --- Mag Deg
100	0.13 -177	21.10 -20	0.01 -4	0.14 174
180	0.14 -177	21.12 -39	0.01 -6	0.14 171
260	0.15 -180	20.95 -57	0.01 -18	0.14 168
340	0.16 177	20.77 -74	0.01 -21	0.14 164
420	0.17 172	20.60 -92	0.01 -24	0.15 159
500	0.17 164	20.42 -109	0.01 -27	0.16 154

