

RF AMPLIFIER

MODEL *TM3030*

Available as: TM3030, 4 Pin TO-8 (T4)
 TN3030, 4 Pin Surface Mount (SM3)
 FP3030, 4 Pin Flatpack (FP4)
 BX3030, Connectorized Housing (H1)

Features

- Output Power: +18 dBm Typical
- Gain: 14.75 dB 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	500 - 1000 MHz	500 - 1000 MHz
Gain (dB)	14.75	14.0 Min.
Power @ 1 dB Comp. (dBm)	+18	+17 Min.
Reverse Isolation (dB)	-21.0	-20.0 Max.
VSWR In	<1.5:1	2.2:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<2.0	3.0 Max.
Power Vdc	+15	+15
mA	47	52 Max.

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

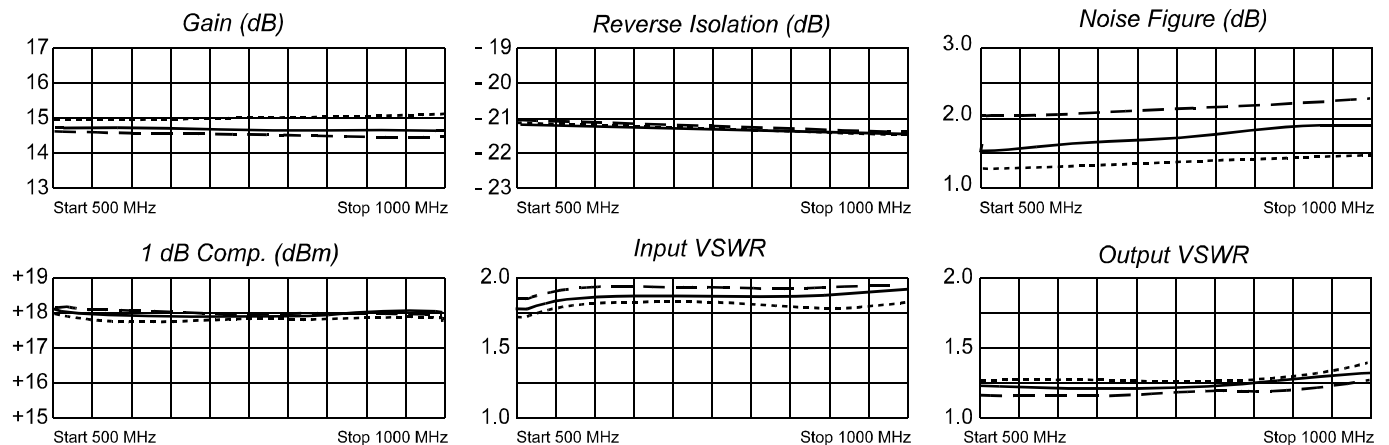
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +40 dBm (Typ.)
 Second Order Two Tone Intercept Point +35 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 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



Legend ——— + 25 °C - - - + 85 °C -55 °C

Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
500	.11	-103	5.58	143	.0881	-14	.19	130
600	.10	-114	5.54	133	.0870	-19	.19	125
700	.10	-140	5.54	124	.0881	-24	.19	118
800	.12	-152	5.54	114	.0881	-28	.18	109
900	.14	-170	5.54	104	.0864	-31	.18	100
1000	.18	178	5.48	93	.0882	-36	.18	86



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