

RF AMPLIFIER

MODEL *TM3028*

Available as: TM3028, 4 Pin TO-8 (T4)
 TN3028, 4 Pin Surface Mount (SM3)
 FP3028, 4 Pin Flatpack (FP4)
 BX3028, Connectorized Housing (H1)

Features

- n High Output Power: +24 dBm Typical
- n Low Noise Figure: 2.2 dB Typical
- n Operating Temp. - 55 °C to +85 °C
- n Units are Unconditionally Stable

Typical Intermodulation Performance at 25 ° C

- Second Order Harmonic Intercept Point +57 dBm (Typ.)
- Second Order Two Tone Intercept Point +51 dBm (Typ.)
- Third Order Two Tone Intercept Point +38 dBm (Typ.)

Specifications

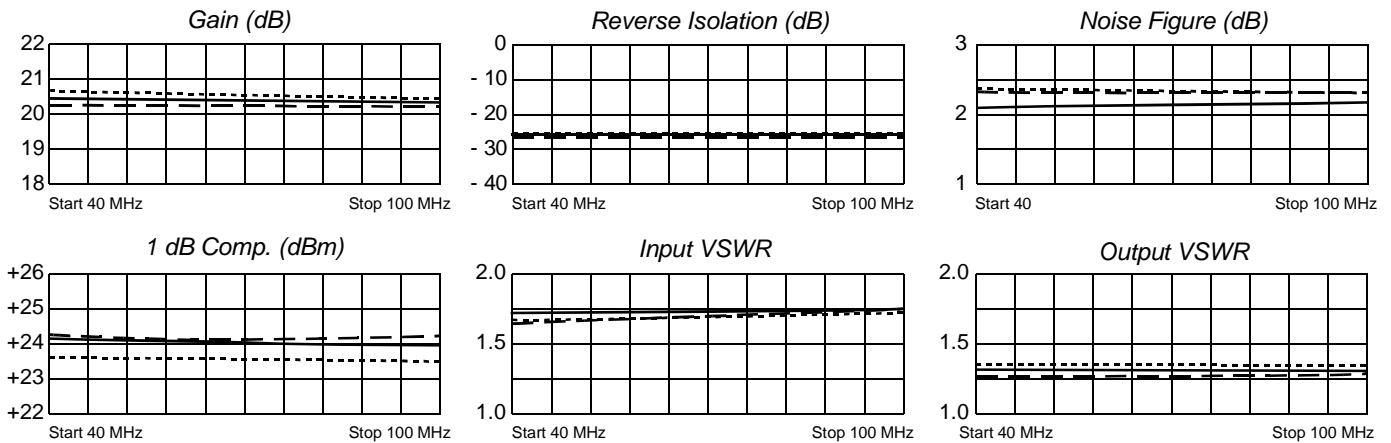
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	40 - 100 MHz	40 - 100 MHz
Gain (dB)	20.5	19.5 Min.
Power @ 1 dB Comp. (dBm)	+24	+23.0 Min.
Reverse Isolation (dB)	-25	-24 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.45:1	2.0:1 Max.
Noise Figure (dB)	2.2	3.0 Max.
Power Vdc	+15	+15
mA	82	94 Max.

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.)

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

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
40	.26	-37	10.62	167	.0542	166	.10	-32
50	.26	-43	10.60	162	.0530	159	.09	-36
60	.26	-50	10.54	156	.0533	153	.09	-38
70	.27	-57	10.48	152	.0545	146	.09	-45
80	.27	-66	10.41	147	.0558	142	.10	-49
90	.27	-73	10.33	142	.0581	134	.09	-57
100	.27	-81	10.23	137	.0568	129	.09	-66



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