

RF AMPLIFIER

MODEL *TM3036*

Available as: TM3036, 4 Pin TO-8 (T4)
 TN3036, 4 Pin Surface Mount (SM3)
 FP3036, 4 Pin Flatpack (FP4)
 BX3036, Connectorized Housing (H1)

Features

- High Output Power: +25.5 dBm Typical
- Low Noise Figure: 2.5 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	25 - 110 MHz	25 - 110 MHz
Gain (dB)	20.5	20.0 Min.
Power @ 1 dB Comp. (dBm)	+25.5	+24.0 Min.
Reverse Isolation (dB)	-25	-24 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	2.5	3.5 Max.
VSWR Vdc	+15	+15
mA	102	115 Max.

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

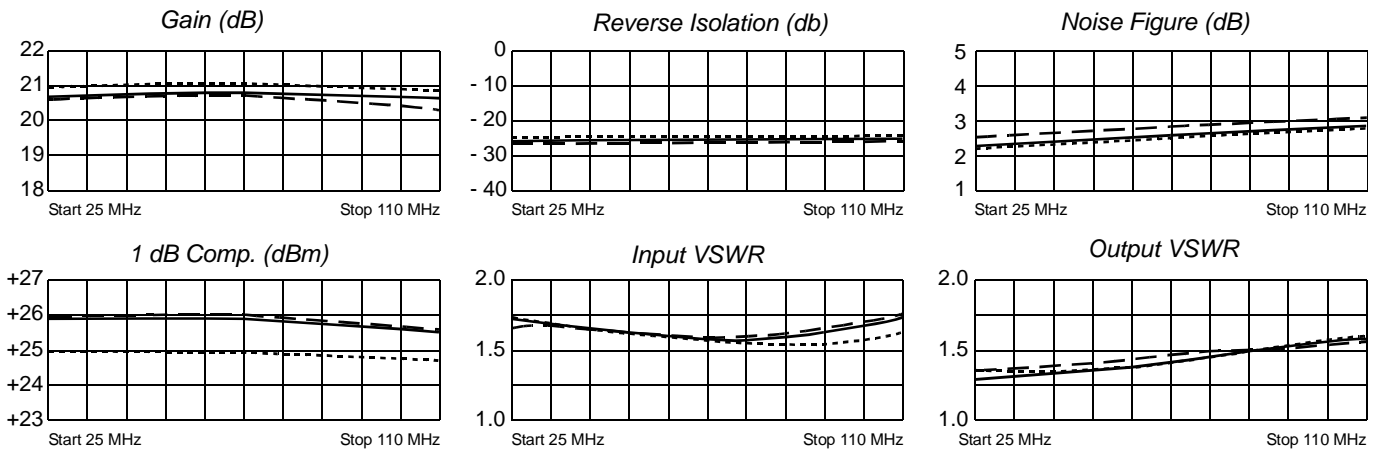
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.... +55 dBm (Typ.)
 Second Order Two Tone Intercept Point.... +50 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +40 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 + 18 dBm
 Short Term RF Input Power.....100 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.3 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
30	.26	-28	10.85	169	.0499	168	.13	-20
50	.25	-40	10.85	156	.0494	154	.14	-21
70	.22	-56	10.91	144	.0547	140	.16	-26
90	.19	-78	10.85	132	.0554	125	.18	-37
110	.17	-106	10.85	119	.0580	113	.21	-51



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