

RF AMPLIFIER

MODEL *TM3075*

Available as: TM3075, 4 Pin TO-8 (T4)
 TN3075, 4 Pin Surface Mount (SM3)
 FP3075, 4 Pin Flatpack (FP4)
 BX3075, Connectorized Housing (H1)

Features

- High Gain: 22.5 dB Typical
- Low Noise Figure: <2.4 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	5 - 500 MHz	5 - 500 MHz
Gain (dB)	22.5	21.0 Min.
Power @ 1 dB Comp. (dBm)	+10	+8 Min.
Reverse Isolation (dB)	-24	-21 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<2.4	3.0 Max.
Power Vdc	+12	+12
mA	22	25 Max.

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

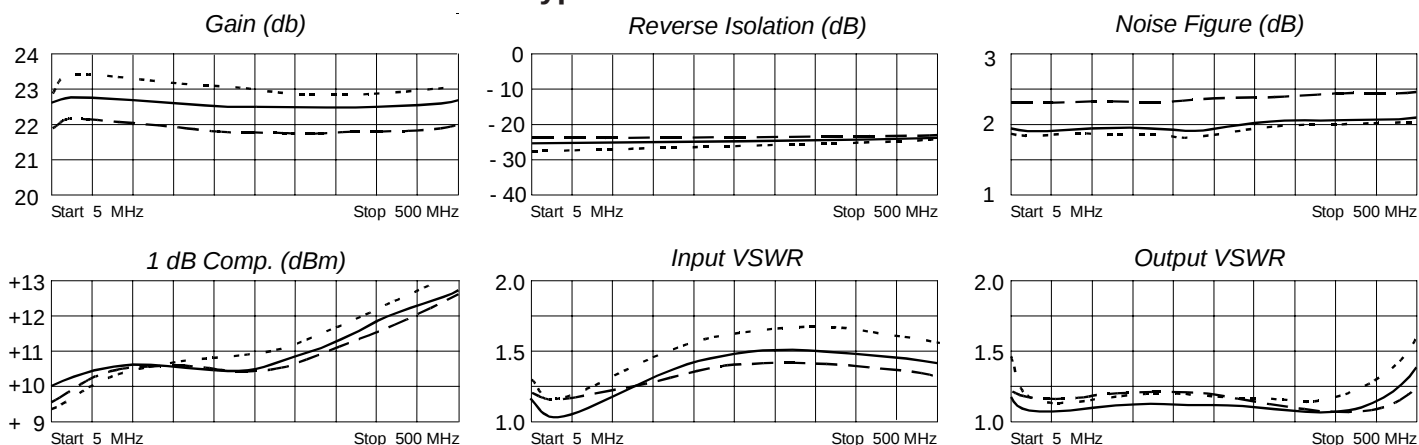
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +32 dBm (Typ.)
 Second Order Two Tone Intercept Point +26 dBm (Typ.)
 Third Order Two Tone Intercept Point +22 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 + 15 Volts
 Continuous RF Input Power + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 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
5	.07	-127	13.16	-174	.05	10	.09	112
50	.06	136	13.33	165	.05	-4	.02	29
100	.08	96	13.17	150	.05	-8	.03	-19
200	.12	38	12.80	119	.05	-19	.06	-44
300	.15	-9	12.33	89	.06	-35	.09	-54
400	.14	-52	12.16	58	.06	-48	.13	-51
500	.09	-126	12.35	24	.06	-69	.22	-38

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