

RF AMPLIFIER

MODEL *TM3076*

Available as: TM3076, 4 Pin TO-8 (T4)
 TN3076, 4 Pin Surface Mount (SM3)
 FP3076, 4 Pin Flatpack (FP4)
 BX3076, Connectorized Housing (H1)

Features

- Medium Gain: 12.5 dB Typical
- High Output Power: +27 dBm Typical
- Operating Temp. -55 °C to +85 °C

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	800-2200 MHz	1000-2000 MHz
Gain (dB)	12.5	12 Min.
Power @ 1 dB Comp. (dBm)	+27	+25.0 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3.5	4.5 Max.
Power Vdc	+15	+15
mA	175	190 Max.

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

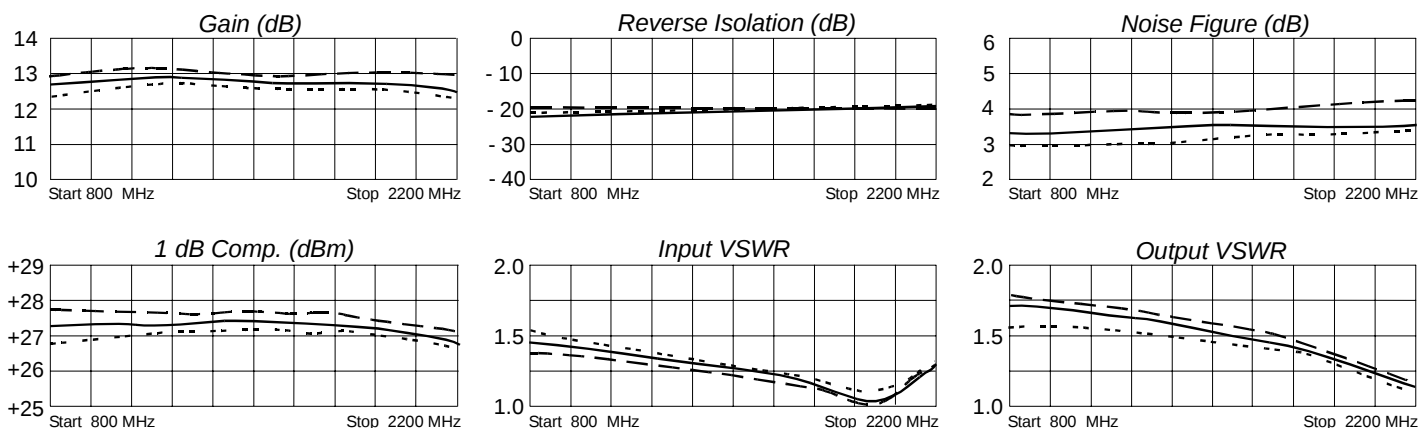
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +51 dBm (Typ.)
 Second Order Two Tone Intercept Point +45 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 + 20 dBm
 Short Term RF Input Power 250 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
800	.20	162	4.50	81	.0882	-43	.28	64
1000	.20	161	4.50	80	.0861	-44	.28	64
1200	.19	160	4.51	80	.0874	-43	.28	63
1400	.19	160	4.52	79	.0873	-44	.28	62
1600	.19	159	4.53	79	.0866	-44	.28	62
1800	.19	159	4.53	78	.0862	-44	.28	61
2000	.19	158	4.54	78	.0864	-45	.28	61
2200	.19	158	4.55	77	.0868	-45	.28	60



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 05/10/05

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001