

RF AMPLIFIER

MODEL *TM3082*

Available as: TM3082, 4 Pin TO-8 (T4)
 TN3082, 4 Pin Surface Mount (SM3)
 FP3082, 4 Pin Flatpack (FP4)
 BX3082, Connectorized Housing (H1)

Features

- Low Noise Figure: 1.5 dB Typical
- Low 5 Volt Supply
- 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	50-200 MHz	50-200 MHz
Gain (dB)	13	11 Min.
Power @ 1 dB Comp. (dBm)	+15	+14 Min.
Reverse Isolation (dB)	-21	-20 Max.
VSWR In	1.7:1	2.0:1 Max.
Out	1.7:1	2.0:1 Max.
Noise Figure (dB)	1.5	2.0 Max.
Power Vdc	+5	+5
mA	35	40 Max.

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

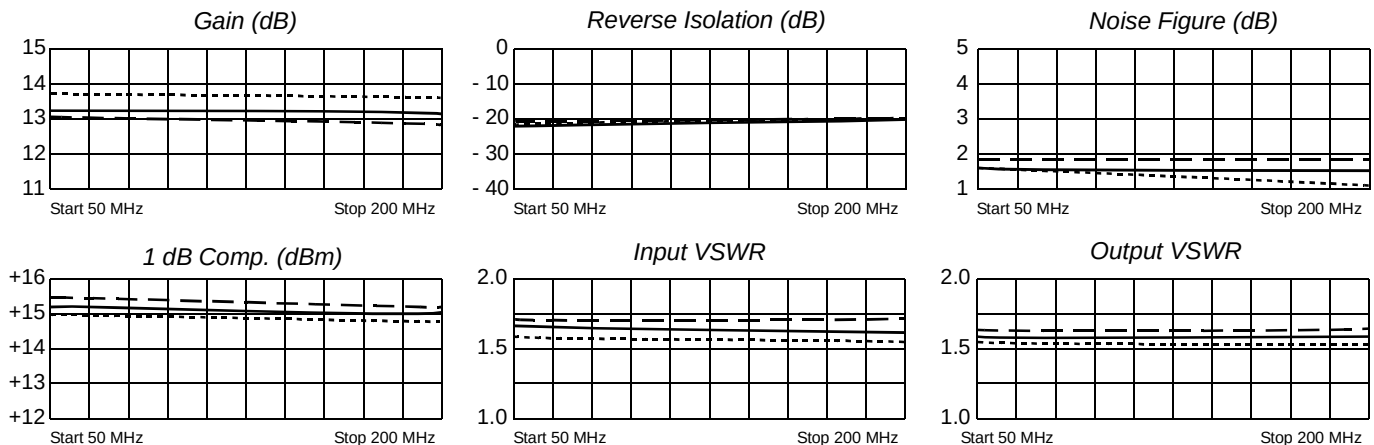
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +41 dBm (Typ.)
 Second Order Two Tone Intercept Point +35 dBm (Typ.)
 Third Order Two Tone Intercept Point +27 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 + 8 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



Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
50	.24	-15	4.69	176	.0859	0	.23	-179
75	.24	-20	4.69	173	.0862	0	.23	180
100	.24	-25	4.67	170	.0869	1	.23	179
125	.23	-31	4.66	167	.0872	1	.23	178
150	.23	-36	4.64	165	.0874	0	.23	178
175	.23	-42	4.61	162	.0873	1	.23	177
200	.23	-48	4.58	159	.0879	1	.23	177



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 8/31/04

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