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 ºC to + 85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º 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.)

Specifications

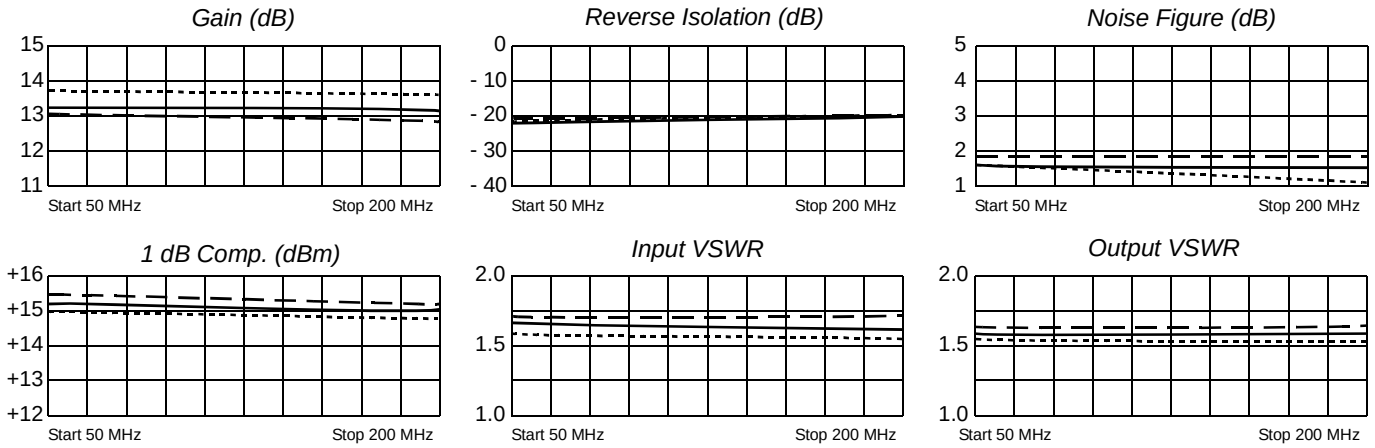
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	50-200 MHz	50-200 MHz
Gain (dB)	13	11 Min.
Power @ 1 dB Comp. (dBm)	+15	+14 Min.
Reverse Isolation (dB)	-21	-20 Max.
VSWR In	1.7:1	2.0:1 Max.
Out	1.7:1	2.0:1 Max.
Noise Figure (dB)	1.5	2.0 Max.
Power Vdc	+5	+5
mA	35	40 Max.

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

Freq.	----S11----		----S21----		----S12----		----S22----	
MHz	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*