RF AMPLIFIER MODEL *TM5152*

Available as: TM5152, 4 Pin TO-8 (T-4)
TM5152, 4 Pin Surface Mount (SM3)
FP5152, 4 Pin Flatpack (FP4)
BX5152, Connectorized Housing (H1)

Features

- Higher Gain: 17 dB Typical
- Higher Output Power: +20 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point..... +53 dBm (Typ.)
Second Order Two Tone Intercept Point..... +47 dBm (Typ.)
Third Order Two Tone Intercept Point..... +33 dBm (Typ.)

Specifications

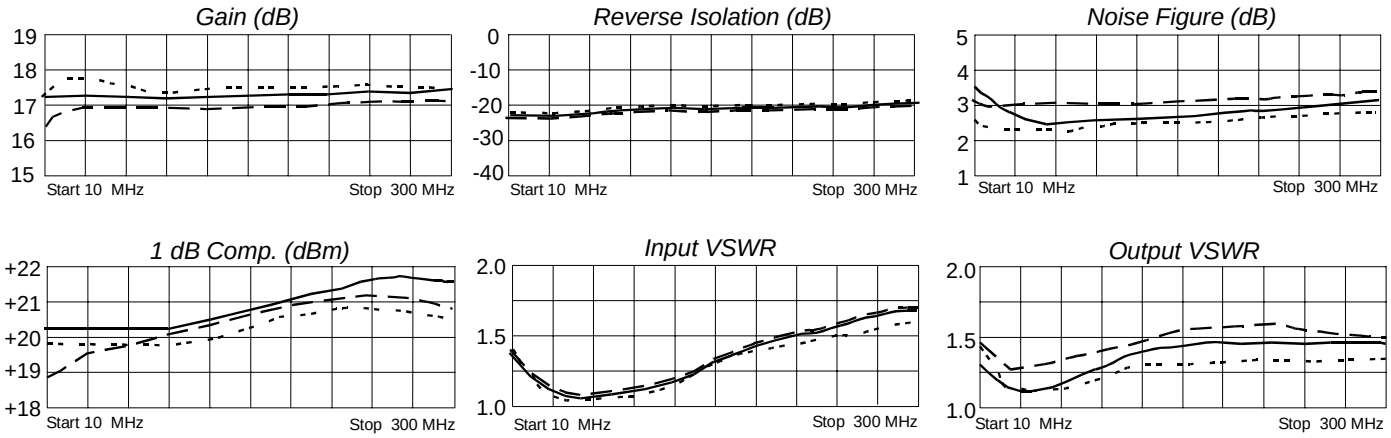
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	10 - 300 MHz	10 - 300 MHz
Gain (dB)	17.0	16.0 Min.
Power @ 1 dB Comp. (dBm)	+20	+17.5 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<3.5	3.8 Max.
Power Vdc	+15	+15 Min.
Power mA	55	60 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 ..... + 18 Volts
Continuous RF Input Power ..... + 20 dBm
Short Term RF Input Power.... 200 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. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
5	.16	- 76	6.84	-156	.09	-155	.15	- 33
50	.04	- 87	7.19	166	.09	163	.08	20
100	.07	- 94	7.15	148	.09	145	.12	23
200	.15	-123	7.16	114	.10	108	.18	3
300	.24	-159	7.21	80	.11	75	.18	- 30
400	.29	155	7.38	43	.11	41	.16	- 82
500	.29	89	7.30	1	.11	5	.19	-161

Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 6/17/04

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