

# RF AMPLIFIER

## MODEL *TM5352*

Available as: TM5352, 4 Pin TO-8 (T4)  
 TN5352, 4 Pin Surface Mount (SM3)  
 FP5352, 4 Pin Flatpack (FP4)  
 BX5352, Connectorized Housing (H1)

### Features

- Gain: +17 dB Typical
- Output Power: +18 dBm 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	10 - 300 MHz	10 - 300 MHz
Gain (dB)	17	16 Min.
Power @ 1 dB Comp. (dBm)	+18	+17 Min.
Reverse Isolation (dB)	-26	-25 Max.
VSWR In	1.5:1	1.6:1 Max.
Out	1.5:1	1.6:1 Max.
Noise Figure (dB)	3.5	3.8 Max.
Power Vdc	+12	+12
mA	68	75 Max.

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

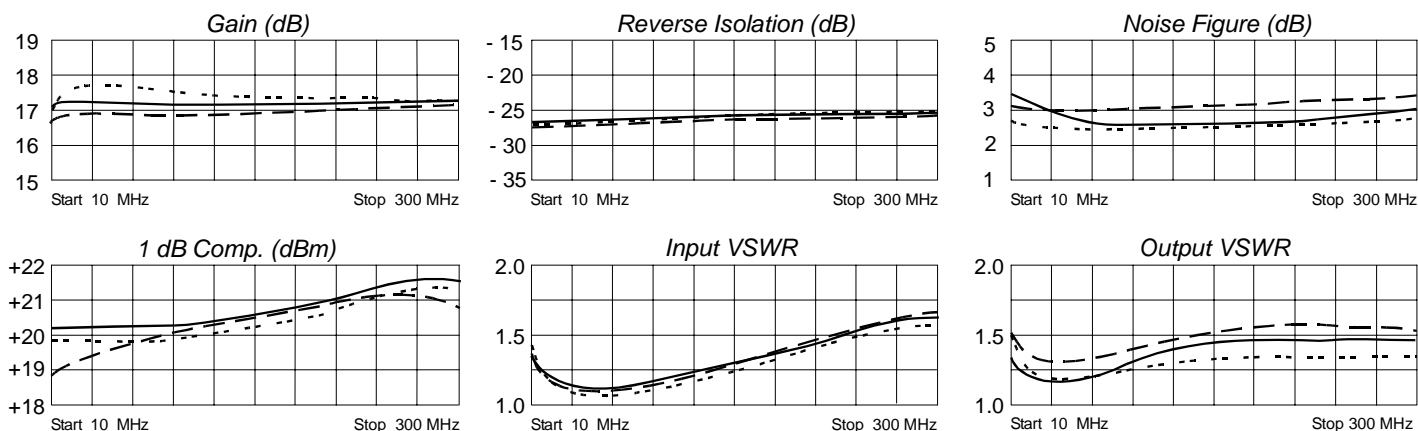
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +53 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +47 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +33 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 ..... 0.2 Watt (3 µsec Max.)

### Typical Performance Data



### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	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 05/05/05

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