

RF AMPLIFIER

MODEL *TM6544*

Available as: TM6544, 4 Pin TO-8 (T4)
 TN6544, 4 Pin Surface Mount (SM3)
 FP6544, 4 Pin Flatpack (FP4)
 BX6544, Connectorized Housing (H1)
 PN6544, 4 Pin Surface Mount (SM11)

Features

- Low Noise: 2 dB Typical
- High IP3 = +32 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 - 500 MHz	10 - 500 MHz
Gain (dB)	12	10.5 Min.
Power @ 1 dB Comp. (dBm)	+15	+13.0 Min.
Reverse Isolation (dB)	-15.5	-14.5 Max.
VSWR In	<1.35:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	2.0	3.5 Max.
Power Vdc	+15	+15
mA	35	38 Max.

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

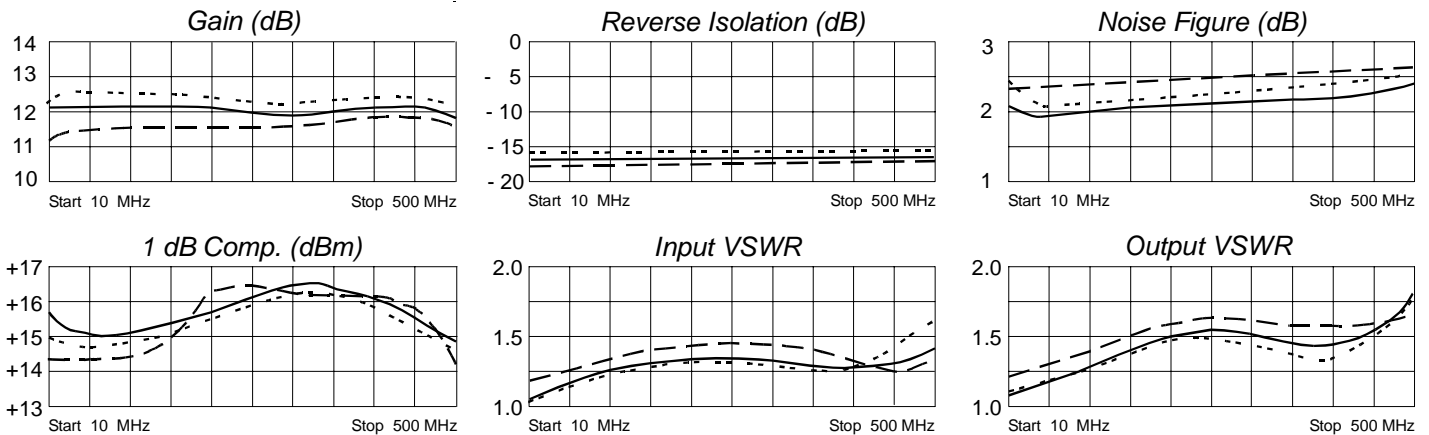
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +52 dBm (Typ.)
 Second Order Two Tone Intercept Point +46 dBm (Typ.)
 Third Order Two Tone Intercept Point +32 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 + 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 °C - - - - + 85 °C ······ -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.01	-33	4.01	-174	.16	-174	.01	-7
50	.04	63	4.03	168	.16	168	.06	70
100	.09	51	4.00	153	.16	153	.12	66
200	.15	14	3.96	126	.16	126	.20	50
300	.15	-30	3.95	99	.16	99	.21	40
400	.11	-103	4.02	69	.16	71	.19	52
500	.18	150	3.93	34	.16	40	.28	78



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 05/11/05

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