

RF AMPLIFIER

MODEL *TM6547*

Available as: TM6547, 4 Pin TO-8 (T4)
 TN6547, 4 Pin Surface Mount (SM3)
 FP6547, 4 Pin Flatpack (FP4)
 BX6547, Connectorized Housing (H1)

Features

- n High IP3: +35 dBm Typical
- n High Output Power: +19 dBm Typical
- n Operating Temp. - 55 °C to +85 °C
- n 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)	12.5	11.0 Min.
Power @ 1 dB Comp. (dBm)	+19	+17.5 Min.
Reverse Isolation (dB)	-17	-15 Max.
VSWR In	1.75:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	<4.0	4.5 Max.
Power Vdc	+15	+15
mA	55	58 Max.

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

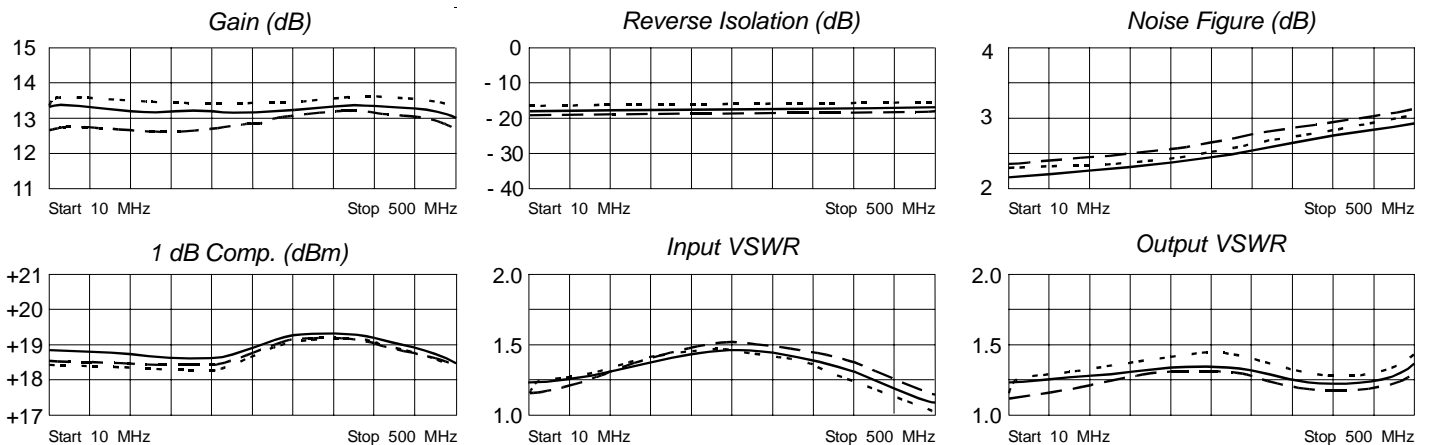
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+54 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+48 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+35 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..... 0.2 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	.10	-13	4.62	-173	.13	-174	.10	-8
50	.10	7	4.62	169	.13	169	.11	3
100	.12	14	4.57	155	.13	153	.12	5
200	.17	6	4.54	129	.13	127	.15	-8
300	.18	-16	4.53	103	.13	102	.14	-39
400	.13	-44	4.52	75	.14	76	.12	-94
500	.04	-89	4.43	43	.14	50	.17	-170
600	.09	92	4.05	10	.15	22	.31	140



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