RF Amplifier
High IP3: +35 dBm

Model TM6547
10 to 500 MHz

Features
- High IP3: +35 dBm
- High Output Power: + 19 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
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.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	<4.0	4.5 Max.
Power Vdc	+15	+15
mA	55	58 Max.

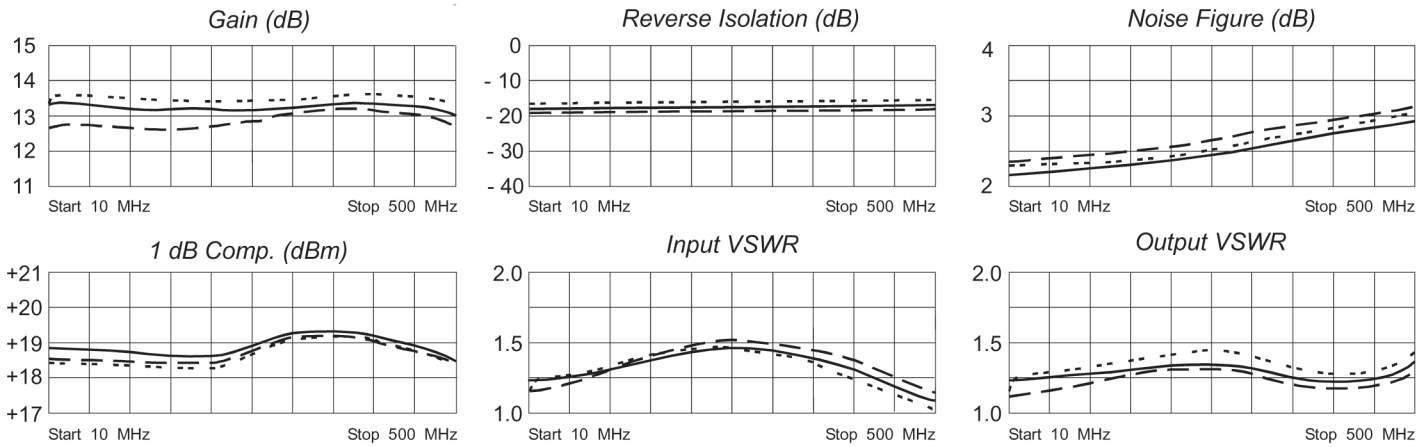
Note: Care should always be taken to effectively ground the case of each unit.

Typical Intermodulation Performance at 25 º 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 ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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.)

Packaging Options (see Appendix)
TM6547, 4 Pin TO-8 (T4)
TN6547, 4 Pin Surface Mount (SM3)
FP6547, 4 Pin Flatpack (FP4)
BX6547, Connectorized Housing (H1)

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
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