

RF AMPLIFIER

MODEL *TM6545*

Available as: TM6545, 4 Pin TO-8 (T4)
 TN6545, 4 Pin Surface Mount (SM3)
 FP6545, 4 Pin Flatpack (FP4)
 BX6545, Connectorized Housing (H1)

Features

- High Dynamic Range
- High Output Power: +20 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)	11.5	10.0 Min.
Power @ 1 dB Comp. (dBm)	+20.5	+18.0 Min.
Reverse Isolation (dB)	-15	-14 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.0	5.5 Max.
Power Vdc	+15	+15
mA	60	65 Max.

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

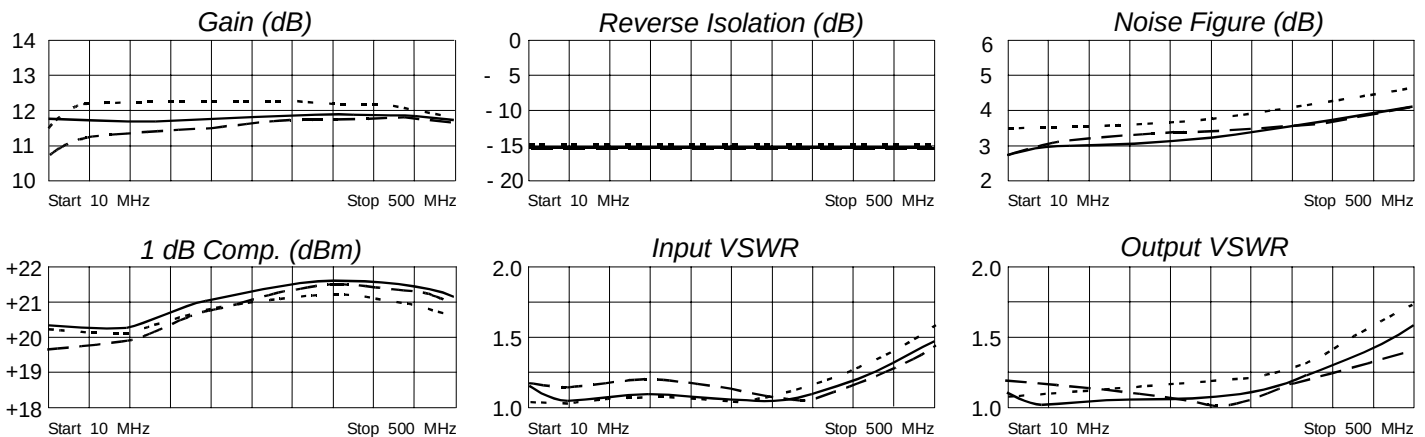
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +54 dBm (Typ.)
 Second Order Two Tone Intercept Point +48 dBm (Typ.)
 Third Order Two Tone Intercept Point +36 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



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.04	-76	3.93	-174	.16	-174	.03	-55
50	.04	75	3.89	168	.16	167	.04	64
100	.09	58	3.86	155	.16	153	.08	62
200	.16	21	3.88	130	.16	126	.13	45
300	.18	-23	3.94	104	.17	101	.12	32
400	.17	-87	4.06	76	.17	75	.08	67
500	.22	-169	4.04	44	.18	49	.19	106



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