

RF AMPLIFIER

MODEL *TM6588*

Available as: TM6588, 4 Pin TO-8 (T4)
 TN6588, 4 Pin Surface Mount (SM3)
 FP6588, 4 Pin Flatpack (FP4)
 BX6588, Connectorized Housing (H1)

Features

- High Gain: 18.5 dB Typical
- High Output Power: +21 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	5 - 500 MHz	5 - 450 MHz
Gain (dB)	18.5	17.5 Min.
Power @ 1 dB Comp. (dBm)	+21	+19 Min.
Reverse Isolation (dB)	-20	-17 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	4.5	7.0 Max.
Power Vdc	+15	+15
mA	80	87 Max.

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

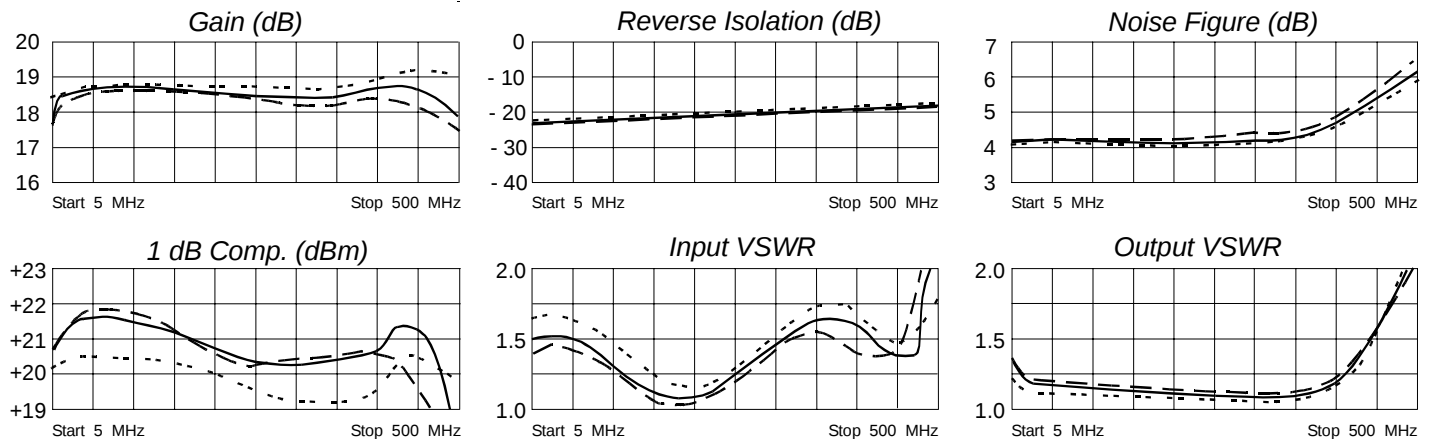
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +44 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 +18 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
5	.20	-150	7.94	-172	.07	9	.29	171
50	.20	166	8.39	161	.07	- 3	.22	166
100	.15	144	8.44	141	.08	- 8	.20	155
200	.03	- 1	8.45	99	.09	- 25	.12	127
300	.20	- 94	8.32	55	.10	- 46	.02	65
400	.23	-152	8.45	6	.12	- 74	.04	47
450	.15	135	8.62	- 24	.13	- 95	.21	28
500	.33	19	7.91	- 65	.14	-126	.52	- 8



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