

RF AMPLIFIER

MODEL *TM6582*

Available as: TM6582, 4 Pin TO-8 (T4)
 TN6582, 4 Pin Surface Mount (SM3)
 FP6582, 4 Pin Flatpack (FP4)
 BX6582, Connectorized Housing (H1)

Features

- Low Noise Figure: 3.5 dB Typical
- High Output Power: +21 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +49 (Typ.)
 Second Order Two Tone Intercept Point +43 (Typ.)
 Third Order Two Tone Intercept Point +33 (Typ.)

Specifications

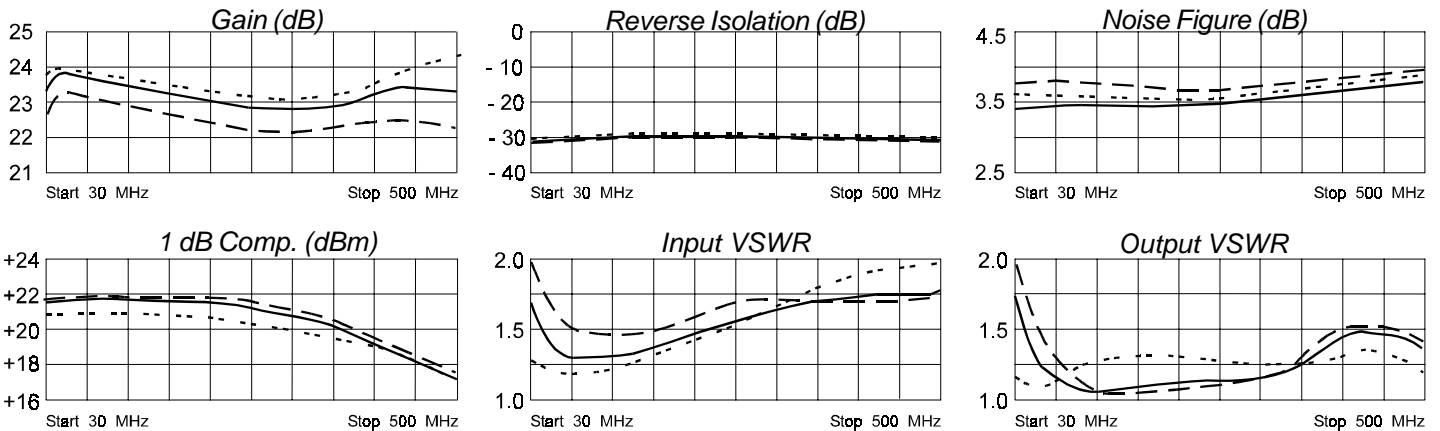
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 500 MHz	30 - 500 MHz
Gain (dB)	23	21.5 Min.
Power @ 1 dB Comp. (dBm)	+21	+17.0 Min.
Reverse Isolation (dB)	- 29	- 27 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.25:1	2.0:1 Max.
Noise figure (dB)	3.5	4.5 Max.
Power Vdc	+15	+15
mA	47	52 Max.

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

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 +10 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
20	.36	- 52	13.26	-158	.03	25	.42	120
50	.19	- 57	14.65	165	.03	5	.15	100
100	.16	- 56	14.61	130	.03	- 19	.03	135
200	.20	- 74	13.87	70	.03	- 43	.09	-166
300	.26	-104	13.54	13	.03	- 74	.08	137
400	.29	-144	13.99	- 50	.03	-114	.10	8
500	.29	136	14.49	-129	.03	-174	.10	- 50



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