

RF AMPLIFIER

MODEL *TM5822*

Available as: TM5822, 4 Pin TO-8 (T4)
 TN5822, 4 Pin Surface Mount (SM3)
 FP5822, 4 Pin Flatpack (FP4)
 BX5822, Connectorized Housing (H1)

Features

- Wide Bandwidth: 10 - 2000 MHz
- 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 - 2000 MHz	10 - 2000 MHz
Gain (dB)	20	19 Min.
Power @ 1 dB Comp. (dBm)	+11	+10 Min.
Reverse Isolation (dB)	-30	-27 Max.
VSWR In	1.75:1	2.0:1 Max.
Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	5.0	5.5 Max.
Power Vdc	+15	+15
mA	57	60 Max.

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

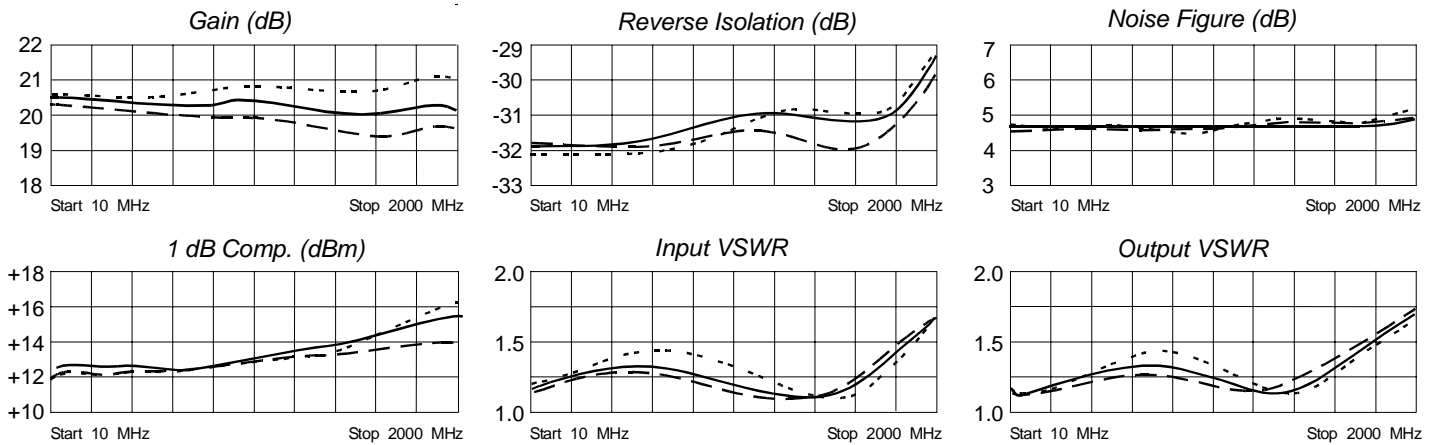
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+39 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+35 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+24 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 + 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
10	.05	-180	10.85	3	.03	7	.05	151
100	.05	-150	10.87	-18	.03	-5	.04	-152
400	.13	-154	10.65	-75	.03	-14	.13	-167
800	.15	164	10.47	-149	.03	-24	.16	131
1200	.04	141	10.57	133	.03	-45	.09	29
1600	.14	-161	10.13	56	.03	-71	.14	-139
2000	.26	104	10.47	-37	.03	-92	.27	120



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