RF AMPLIFIER
MODEL *TM7288*

Available as: TM7288, 4 Pin TO-8 (T4)
TN7288, 4 Pin Surface Mount (SM3)
FP7288, 4 Pin Flatpack (FP4)
BX7288,Connectorized Housing (H1)

Features

- Low Noise Figure: 1.8 dB Typical
- High Gain: 22 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	5-250 MHz	5-250 MHz
Gain (dB)	22	21 Min.
Power @ 1 dB Comp. (dBm)	+7.5	+6.5 Min.
Reverse Isolation (dB)	-23	-22 Max.
VSWR In Out	<1.25:1 <1.25:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	1.8	2.2 Max.
Power Vdc mA	+15 18	+15 Min. 20 Max.

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

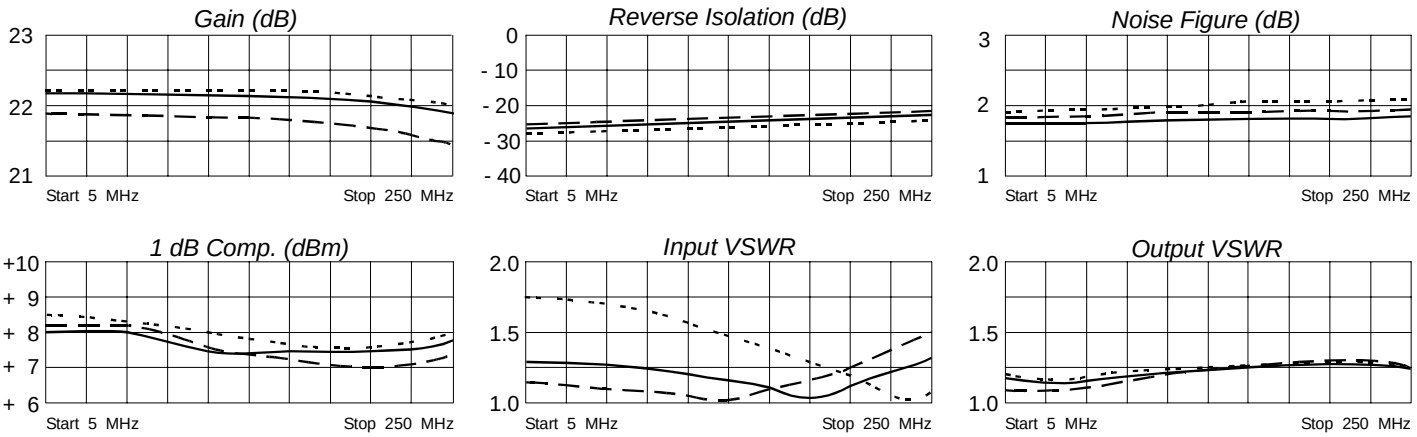
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point..... +29 dBm (Typ.)
Second Order Two Tone Intercept Point..... +23 dBm (Typ.)
Third Order Two Tone Intercept Point..... +20 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 ..... + 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 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
5	.13	-176	12.66	-179	.05	4	.08	-172
10	.12	-180	12.68	177	.05	3	.08	-174
50	.11	162	12.68	161	.05	2	.08	-167
100	.08	140	12.60	141	.06	4	.09	-159
150	.04	110	12.53	121	.06	3	.11	-161
200	.05	- 49	12.51	100	.06	- 1	.12	-172
250	.14	- 78	12.27	77	.07	- 5	.10	162

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