

RF AMPLIFIER

MODEL *TM7272*

Available as: TM7272, 4 Pin TO-8 (T4)
 TN7272, 4 Pin Surface Mount (SM3)
 FP7272, 4 Pin Flatpack (FP4)
 BX7272, Connectorized Housing (H1)

Features

- Gain: 14.7 dB Typical
- Low VSWR: 1.15:1 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	5-250 MHz	10-200 MHz
Gain (dB)	14.7	14 Min./ 15.5 Max.
Power @ 1 dB Comp. (dBm)	+14	+12.0 Min.
Reverse Isolation (dB)	-18.5	-18 Max.
VSWR In	<1.15:1	1.25:1 Max.
Out	<1.15:1	1.25:1 Max.
Noise Figure (dB)	3.0	5.0 Max.
Power Vdc	+5	+5 Min.
mA	35	38 Max.

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

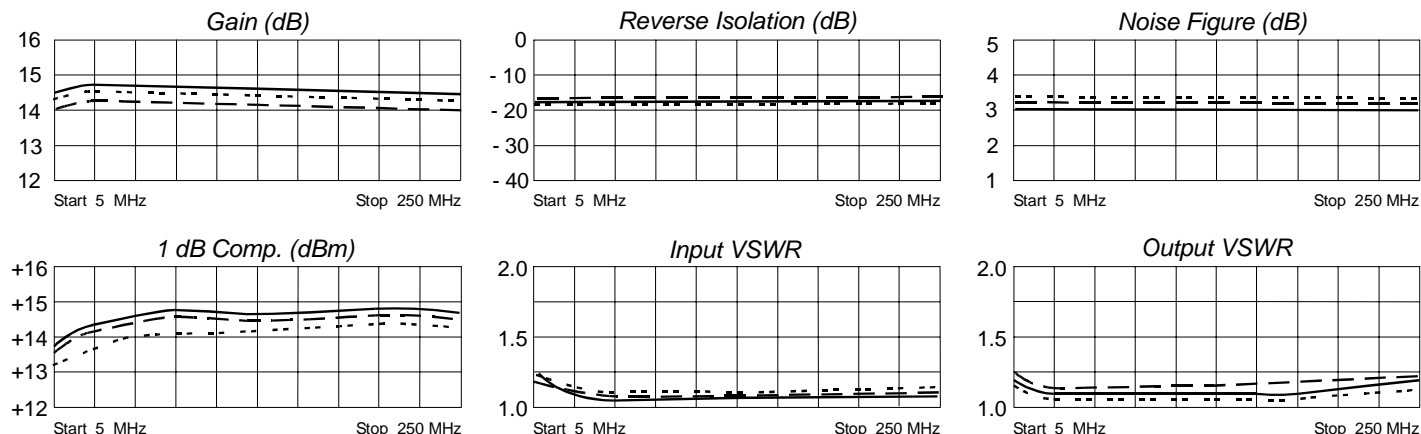
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +46 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +41 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +29 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 + 10 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



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	.09	- 92	5.34	-172	.11	10	.10	126
50	.02	179	5.49	173	.12	2	.02	-176
100	.02	128	5.44	163	.12	- 0	.03	-140
150	.03	108	5.44	145	.12	- 1	.04	-131
200	.03	96	5.42	147	.11	- 1	.05	-133
250	.04	71	5.42	138	.12	- 1	.07	-137



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