

RF AMPLIFIER

MODEL *TM7222*

Available as: TM7222, 4 Pin TO-8 (T4)
 TN7222, 4 Pin Surface Mount (SM3)
 FP7222, 4 Pin Flatpack (FP4)
 BX7222, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.9 dB Typical
- High Gain: 29 dB 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	20-250 MHz	20-250 MHz
Gain (dB)	29	27.5 Min.
Power @ 1 dB Comp. (dBm)	+20.5	+18.0 Min.
Reverse Isolation (dB)	-34.5	-34 Max.
VSWR In	1.75:1	2.0:1 Max.
Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	2.9	4.0 Max.
Power Vdc	+15	+15 Min.
mA	47	52 Max.

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

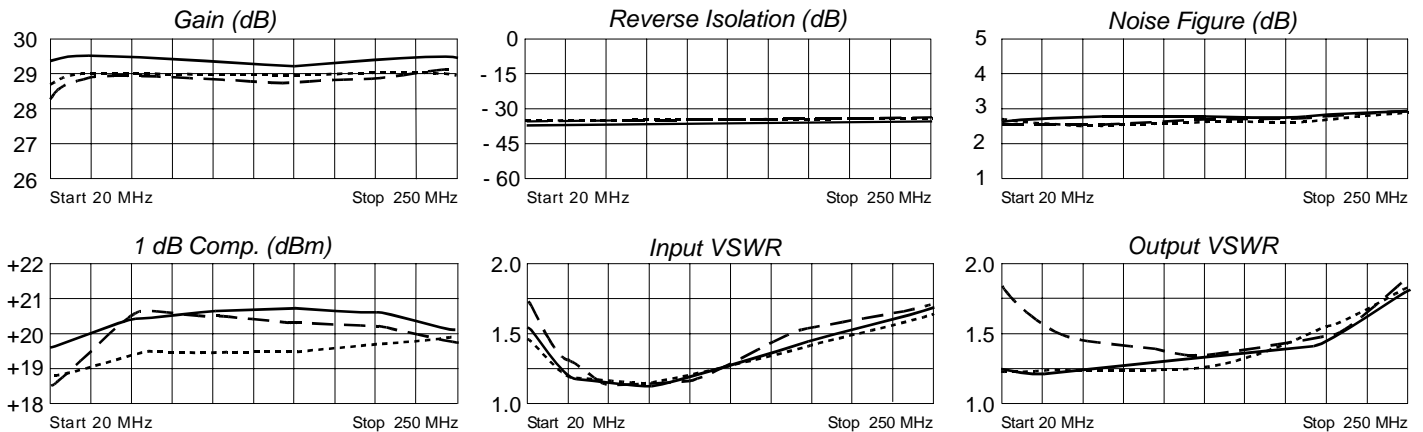
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+44 dBm (Typ)
 Second Order Two Tone Intercept Point.....+38 dBm (Typ)
 Third Order Two Tone Intercept Point.....+32 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 + 13 dBm
 Short Term RF Input Power.....50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watts (3 μsecMax.)

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	.42	- 86	26.71	-141	.02	16	.33	105
20	.21	-118	28.88	-170	.02	7	.18	95
50	.11	165	29.24	158	.02	- 1	.14	61
100	.17	95	28.73	124	.02	-13	.14	- 0
150	.23	59	28.29	92	.02	-18	.18	- 63
200	.28	29	27.96	60	.02	-46	.26	-127
250	.29	- 4	28.50	27	.01	-56	.38	-172
300	.26	- 53	31.16	- 12	.01	-59	.46	156



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