

RF AMPLIFIER

MODEL **TM7202**

Available as: TM7202, 4 Pin TO-8 (T4)
 TN7202, 4 Pin Surface Mount (SM3)
 FP7202, 4 Pin Flatpack (FP4)
 BX7202, Connectorized Housing (H1)

Features

- High Gain: 27 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	5 - 250 MHz	5 - 250 MHz
Gain (dB)	27	26.0 Min.
Power @ 1 dB Comp. (dBm)	+16.5	+15.0 Min.
Reverse Isolation (dB)	-38	-36 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	5.0	6.5 Max.
Power Vdc	+15	+15
mA	88	100 Max.

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

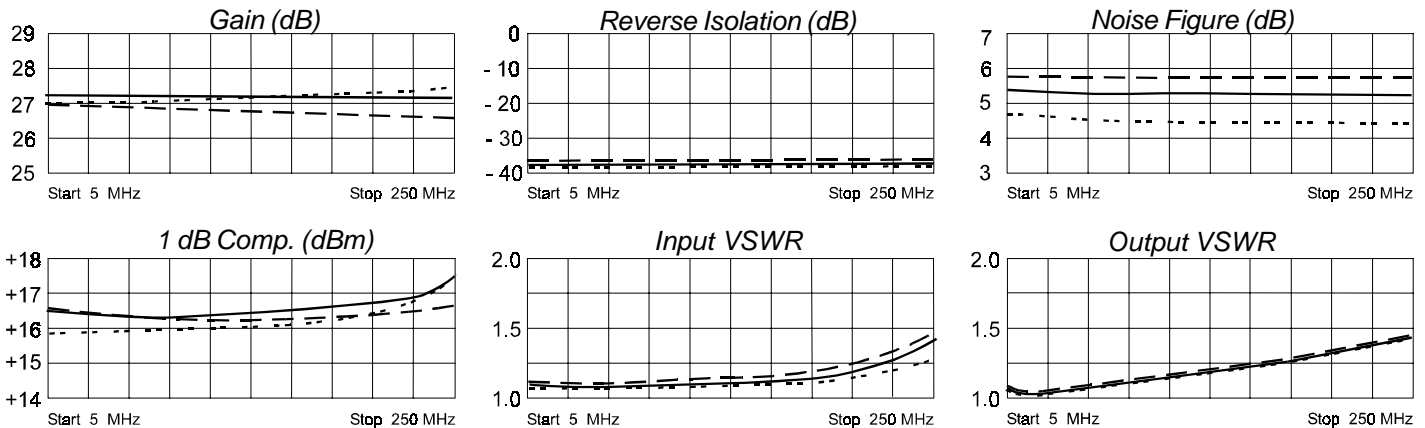
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +43 (Typ.)
 Second Order Two Tone Intercept Point +38 (Typ.)
 Third Order Two Tone Intercept Point +29 (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 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	.03	-76	22.89	2	.01	5	.03	-104
25	.01	-72	22.87	- 11	.01	16	.02	-116
50	.02	-67	22.80	- 24	.01	7	.04	-118
100	.03	-67	22.80	- 49	.01	39	.07	-139
150	.05	-52	22.82	- 74	.01	38	.10	-155
200	.08	-43	22.76	- 99	.01	41	.14	-171
250	.15	-44	22.71	-125	.01	35	.19	176



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