

RF AMPLIFIER

MODEL *TM7208*

Available as: TM7208, 4 Pin TO-8 (T4)
 TN7208, 4 Pin Surface Mount (SM3)
 FP7208, 4 Pin Flatpack (FP4)
 BX7208, Connectorized Housing (H1)

Features

- Low Noise Figure: <1.4 dB Typical
- High Gain: 22.5 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)	22.5	21.0 Min.
Power @ 1 dB Comp. (dBm)	+ 3	+ 0.0 Min.
Reverse Isolation (dB)	- 25	- 24 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	<1.4	2.0 Max.
Power Vdc	+15	+15 Max.
mA	10	12 Max.

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

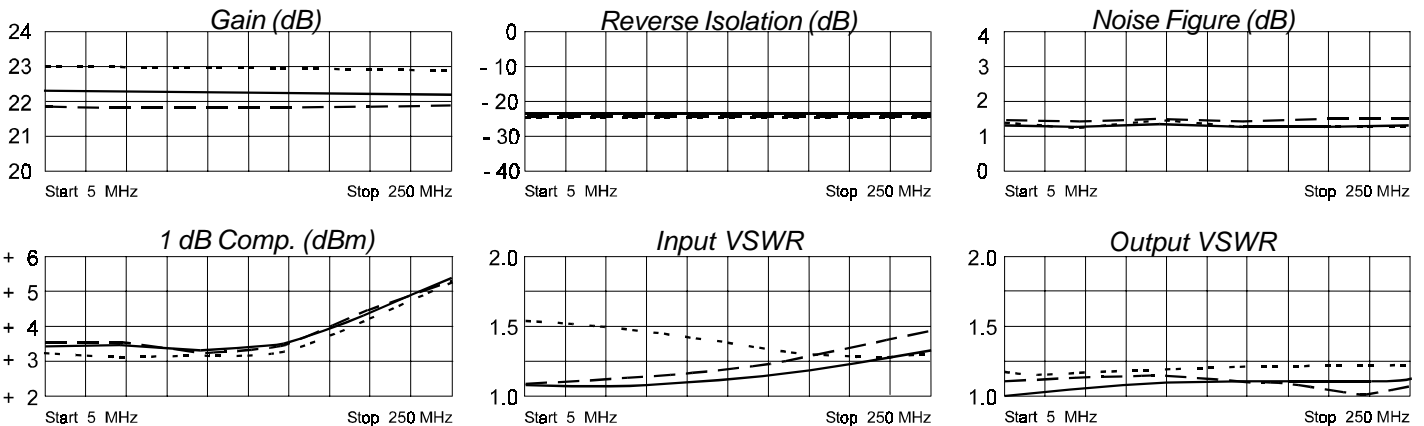
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +20 (Typ.)
 Second Order Two Tone Intercept Point +13 (Typ.)
 Third Order Two Tone Intercept Point +16 (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 + 6 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	-165	13.11	-178	.05	5	.01	-140
50	.02	-159	12.99	164	.05	-1	.03	79
100	.04	-128	13.00	147	.05	1	.04	64
150	.07	-115	13.02	130	.05	1	.04	65
200	.11	-117	13.04	112	.06	-1	.04	76
250	.16	-126	12.97	93	.06	-1	.07	110



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 •••• FAX 215-464-4001 3/18/03