

RF AMPLIFIER

MODEL *TM7210*

Available as: TM7210, 4 Pin TO-8 (T4)
 TN7210, 4 Pin Surface Mount (SM3)
 FP7210, 4 Pin Flatpack (FP4)
 BX7210, Connectorized Housing (H1)

Features

- Low Noise Figure: <1.5dB Typical
- High Power: +13 dBm 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	10-300 MHz	10-200 MHz
Gain (dB)	9±0.5	8.0 Min.
Power @ 1 dB Comp. (dBm)	+14	+12.5 Min.
Reverse Isolation (dB)	- 11.5	- 11 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.35:1	2.0:1 Max.
Noise figure (dB)	1.3	2.0 Max.
Power Vdc	+15	+15
mA	15	17 Max.

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

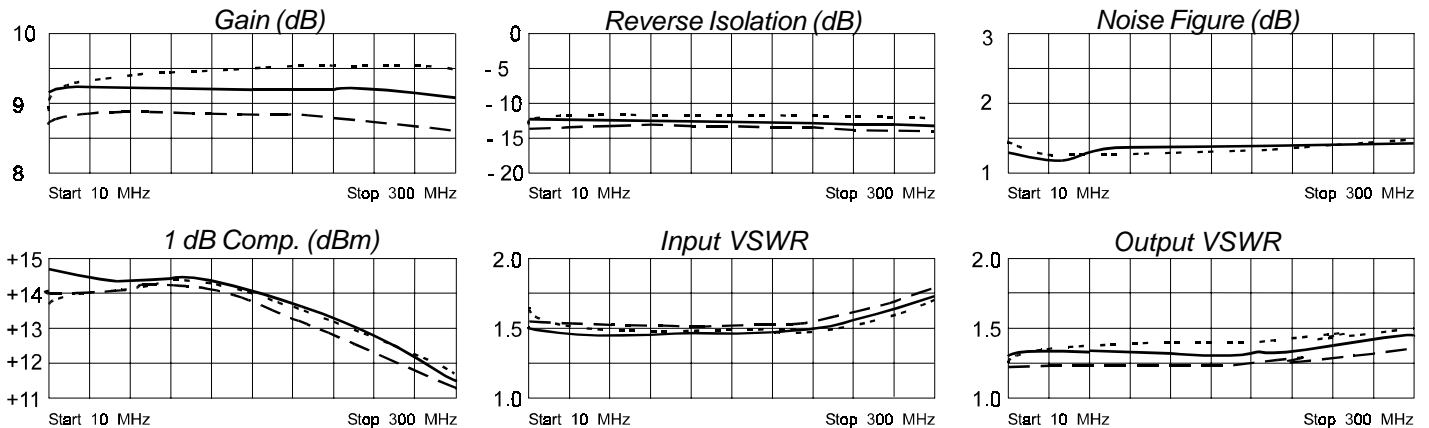
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +53 (Typ.)
 Second Order Two Tone Intercept Point +48 (Typ.)
 Third Order Two Tone Intercept Point +31 (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
10	.21	180	2.85	2	.26	8	.13	8
50	.19	173	2.89	-11	.26	-14	.15	-14
100	.19	170	2.89	-24	.26	-38	.14	-38
150	.18	169	2.89	-36	.26	-62	.14	-62
200	.20	170	2.88	-49	.25	-91	.13	-91



2707 Black Lake Place, Philadelphia, PA 19154

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