

# RF AMPLIFIER

## MODEL *TM7211*

Available as: TM7211, 4 Pin TO-8 (T4)  
 TN7211, 4 Pin Surface Mount (SM3)  
 FP7211, 4 Pin Flatpack (FP4)  
 BX7211, Connectorized Housing (H1)

### Features

- Low Noise Figure: <2.0 dB Typical
- High Power: +20 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	10-200 MHz	30 -200 MHz
Gain (dB)	8.5	7.5 Min.
Power @ 1 dB Comp. (dBm)	+20	+19.0 Min.
Reverse Isolation (dB)	- 12	- 11 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.35:1	2.0:1 Max.
Noise figure (dB)	1.8	3.0 Max.
Power Vdc	+15	+15
mA	30	33 Max.

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

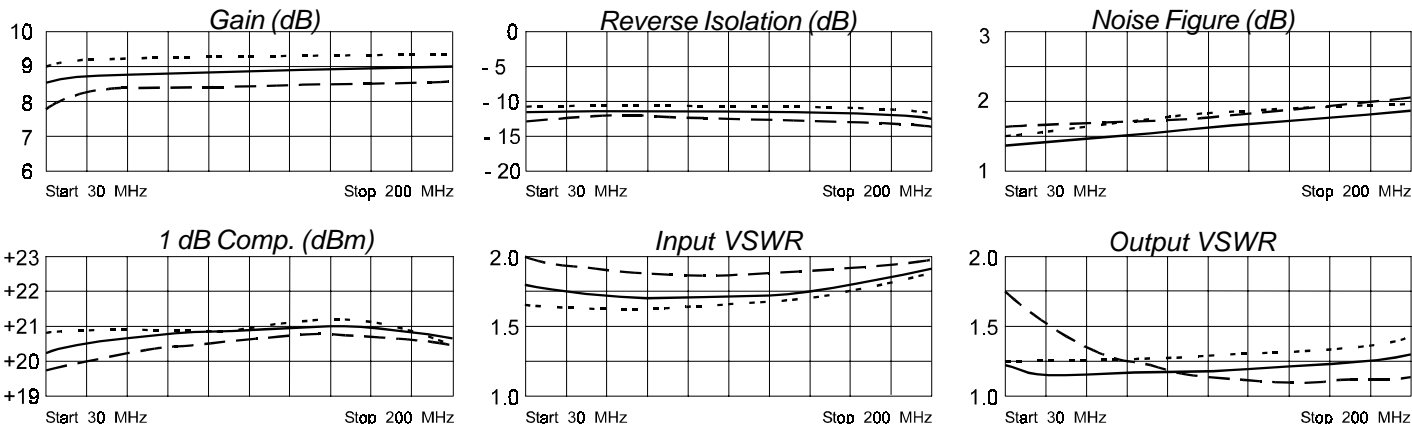
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +61 (Typ.)  
 Second Order Two Tone Intercept Point ..... +55 (Typ.)  
 Third Order Two Tone Intercept Point ..... +40 (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 ..... + 15 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
20	.33	155	2.61	11	.24	12	.21	95
50	.28	165	2.71	- 1	.25	- 2	.08	60
100	.27	169	2.73	-14	.25	-14	.05	-25
150	.28	172	2.76	-24	.24	-23	.08	-74
200	.31	171	2.78	-34	.23	-33	.13	-96



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