

# RF AMPLIFIER

## MODEL *TM7201*

Available as: TM7201, 4 Pin TO-8 (T4)  
 TN7201, 4 Pin Surface Mount (SM3)  
 FP7201, 4 Pin Flatpack (FP4)  
 BX7201, Connectorized Housing (H1)

### Features

- High Gain: 29 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +36 dBm (Typ.)  
 Second Order Two Tone Intercept Point..... +30 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +19 dBm (Typ.)

### Specifications

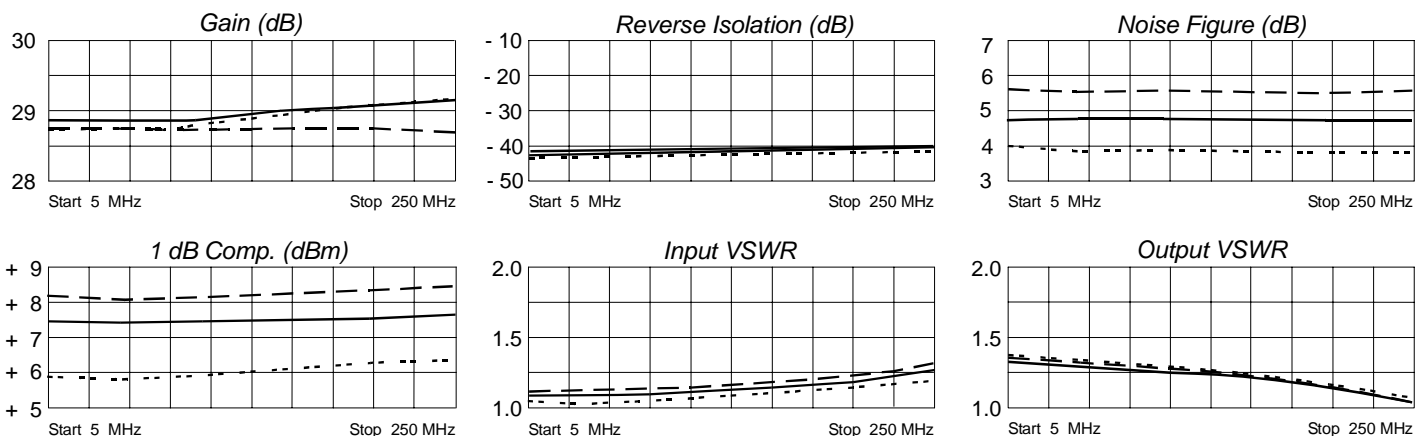
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-250 MHz	5-250 MHz
Gain (dB)	29	27.5 Min.
Power @ 1 dB Comp. (dBm)	+7	+5.5 Min.
Reverse Isolation (dB)	-40	-38 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.4:1	2.0:1 Max.
Noise Figure (dB)	<5.0	6.5 Max.
Power Vdc	+15	+15 Min.
mA	35	38 Max.

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

### 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	.05	-27	27.77	2	.01	8	.14	-10
25	.04	-16	27.75	-10	.01	10	.13	-7
50	.04	-23	27.80	-21	.01	21	.13	-9
100	.05	-43	27.97	-43	.01	11	.12	-19
150	.07	-49	28.22	-64	.01	29	.09	-28
200	.08	-54	28.43	-87	.01	25	.06	-37
250	.11	-59	28.69	-110	.01	32	.02	-61



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