

# RF AMPLIFIER

## MODEL *TM7371*

Available as: TM7371, 4 Pin TO-8 (T4)  
 TN7371, 4 Pin Surface Mount (SM3)  
 FP7371, 4 Pin Flatpack (FP4)  
 BX7371, Connectorized Housing (H1)

### Features

- Low Noise Figure: < 2.0 dB Typical
- High Gain: 18 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	1 - 300 MHz	5 - 250 MHz
Gain (dB)	18	16.0 Min.
Power @ 1 dB Comp. (dBm)	+2	+1.0 Min.
Reverse Isolation (dB)	-21	-20 Max.
VSWR In	<1.25:1	2.0:1 Max.
VSWR Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	1.75	2.5 Max.
Power Vdc	+15	+15
mA	9	12 Max.

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

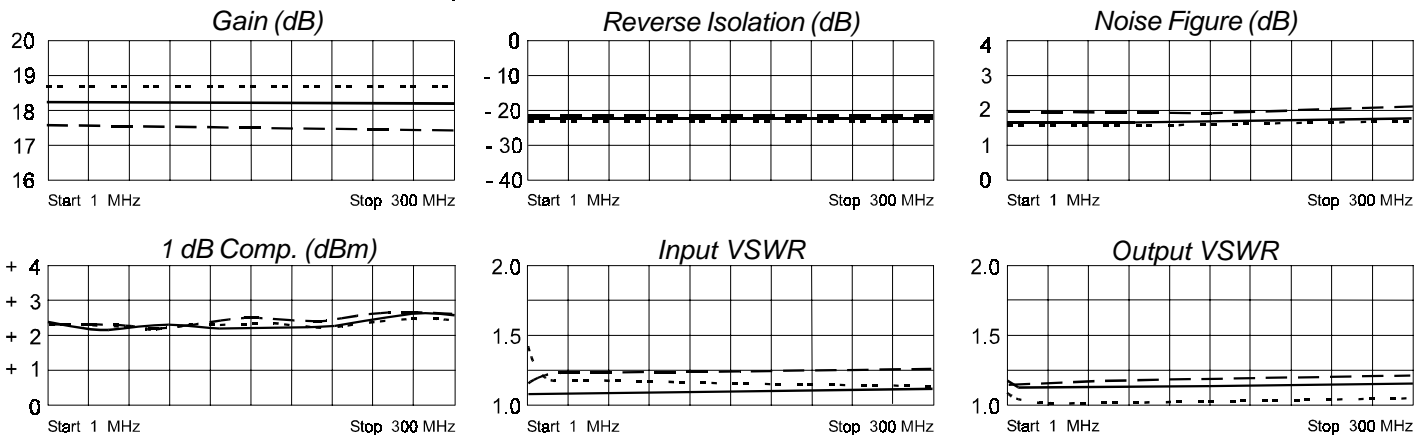
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +20 (Typ.)  
 Second Order Two Tone Intercept Point ..... +15 (Typ.)  
 Third Order Two Tone Intercept Point ..... +14 (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
1	.06	- 92	8.31	-185	.08	18	.07	-88
5	.02	- 14	8.35	-178	.08	4	.03	-17
50	.02	- 6	8.32	170	.08	- 0	.03	- 5
100	.03	- 18	8.29	159	.08	- 0	.03	-23
150	.03	- 27	8.28	149	.08	- 4	.04	-37
200	.04	- 38	8.26	138	.08	- 4	.04	-47
250	.04	- 52	8.27	127	.08	- 5	.05	-64
300	.05	- 74	8.25	117	.08	- 7	.05	-76



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