

# RF AMPLIFIER

## MODEL *TM7370*

Available as: TM7370, 4 Pin TO-8 (T4)  
 TN7370, 4 Pin Surface Mount (SM3)  
 FP7370, 4 Pin Flatpack (FP4)  
 BX7370, Connectorized Housing (H1)  
 RN7370, 4 Pin Surface Mount (SM19)

### Features

- High Output Power: +23 dBm Typical
- Low Noise: 1.9 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	20-250 MHz	20-250 MHz
Gain (dB)	8.5	7.3 Min.
Power @ 1 dB Comp. (dBm)	+23	+20.0 Min.
Reverse Isolation (dB)	-11.0	-10.5 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.35:1	2.0:1 Max.
Noise Figure (dB)	1.9	3.4 Max.
Power Vdc	+15	+15 Min.
mA	45	48 Max.

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

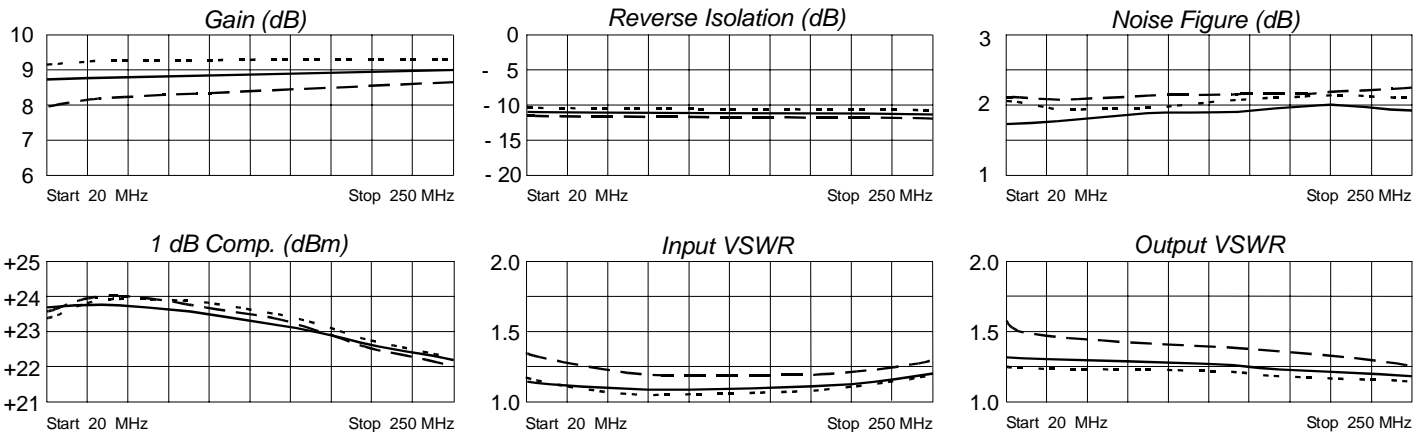
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +55 dBm (Typ.)  
 Second Order Two Tone Intercept Point..... +49 dBm (Typ.)  
 Third Order Two Tone Intercept Point..... +40 dBm (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 ..... + 18 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	.10	126	2.72	6	.27	6	.17	151
50	.05	145	2.73	-10	.27	-10	.13	151
100	.04	155	2.73	-23	.27	-24	.13	133
150	.04	167	2.72	-36	.27	-36	.12	117
200	.05	-179	2.74	-48	.27	-50	.11	104
250	.08	-171	2.75	-61	.27	-62	.10	102
300	.14	-177	2.75	-75	.26	-76	.08	112



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