

# RF AMPLIFIER

## MODEL *TM9366*

Available as: TM9366, 4 Pin TO-8 (T4)  
 TN9366, 4 Pin Surface Mount (SM3)  
 FP9366, 4 Pin Flatpack (FP4)  
 BX9366, Connectorized Housing (H1)

### Features

- High Gain: 27.5 dB Typical
- Operating Temp. - 55 °C to + 85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +37 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+32 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+25 dBm (Typ.)

### Specifications

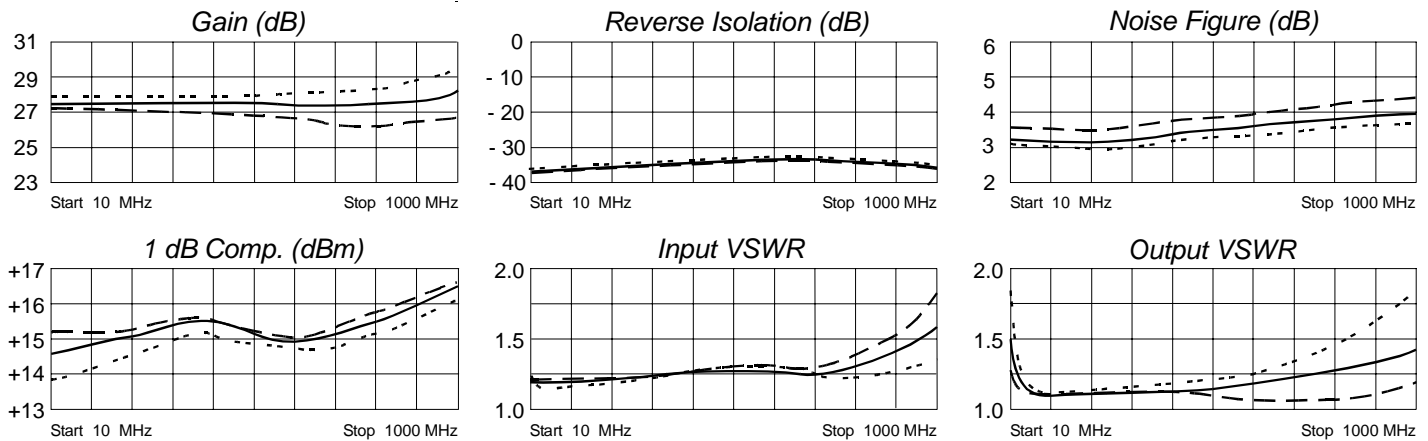
CHARACTERISTIC		TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency		10 - 1000 MHz	10 - 1000 MHz
Gain (dB)		27.5	25.5 Min.
Power @ 1 dB Comp. (dBm)		+15	+13.5 Min.
Reverse Isolation (dB)		-36	-34 Max.
VSWR	In	<1.5:1	2.0:1 Max.
	Out	<1.5:1	2.0:1 Max.
Noise figure (dB)		<4.0	5.0 Max.
Power	Vdc	+15	+15
	mA	63	70 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 ..... + 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
5	.18	33	22.77	23	.01	24	.36	113
10	.19	13	23.76	10	.01	12	.17	99
50	.18	- 10	23.90	- 9	.02	8	.05	76
100	.18	- 22	23.93	- 21	.01	2	.04	66
200	.17	- 47	24.04	- 44	.01	3	.04	54
400	.15	- 93	23.87	- 89	.01	- 6	.04	41
600	.12	-129	23.38	-134	.02	1	.05	75
800	.10	-130	23.59	-178	.02	-12	.12	91
1000	.24	-135	25.96	132	.02	-26	.31	62



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 4/13/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001