

# RF AMPLIFIER

## MODEL *TM7274*

Available as: TM7274, 4 Pin TO-8 (T4)  
 TN7274, 4 Pin Surface Mount (SM3)  
 FP7274, 4 Pin Flatpack (FP4)  
 BX7274, Connectorized Housing (H1)

### Features

- High Gain: 31 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.....+21 dBm (Typ.)

### Specifications

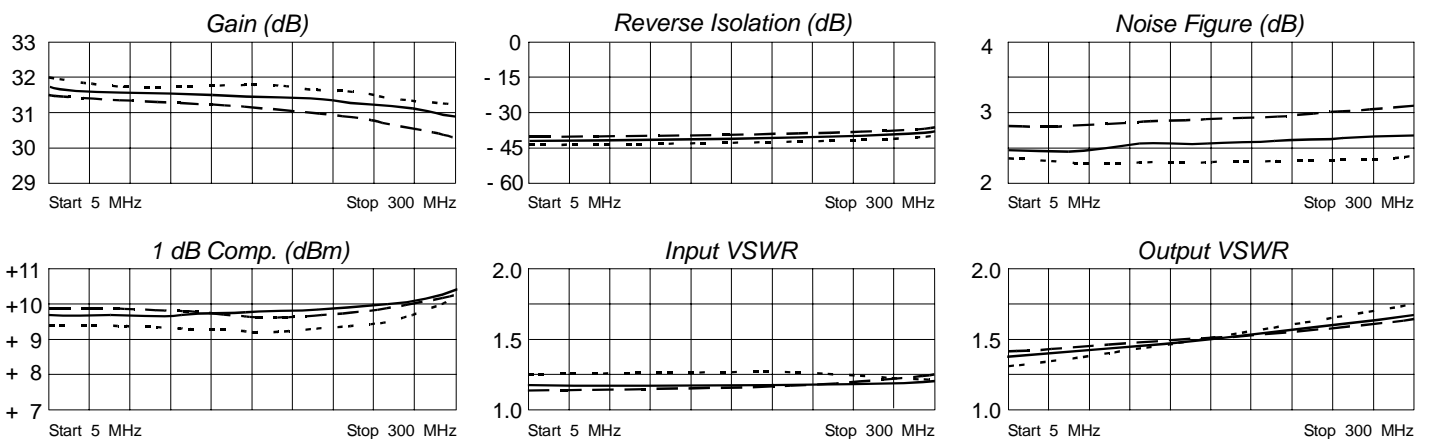
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-300 MHz	5-300 MHz
Gain (dB)	31	29 Min.
Power @ 1 dB Comp. (dBm)	+9.5	+8.0 Min.
Reverse Isolation (dB)	-38	-36 Max.
VSWR In	<1.5:	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<3	4.0 Max.
Power Vdc	+15	+15 Min.
mA	40	44 Max.

### 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.)

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

### 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	.11	-163	36.70	3	.01	7	.17	-174
10	.10	-173	36.76	- 3	.01	4	.17	-177
50	.10	162	36.20	- 24	.01	- 2	.17	177
100	.10	139	36.14	- 49	.01	7	.19	173
200	.10	86	35.42	- 98	.01	19	.23	156
300	.10	12	33.84	-148	.01	8	.26	135
400	.17	- 71	31.35	159	.01	- 2	.29	117



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