

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
- Medium Output Power: +9.5 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	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	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3	4.0 Max.
Power Vdc	+15	+15
mA	40	44 Max.

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

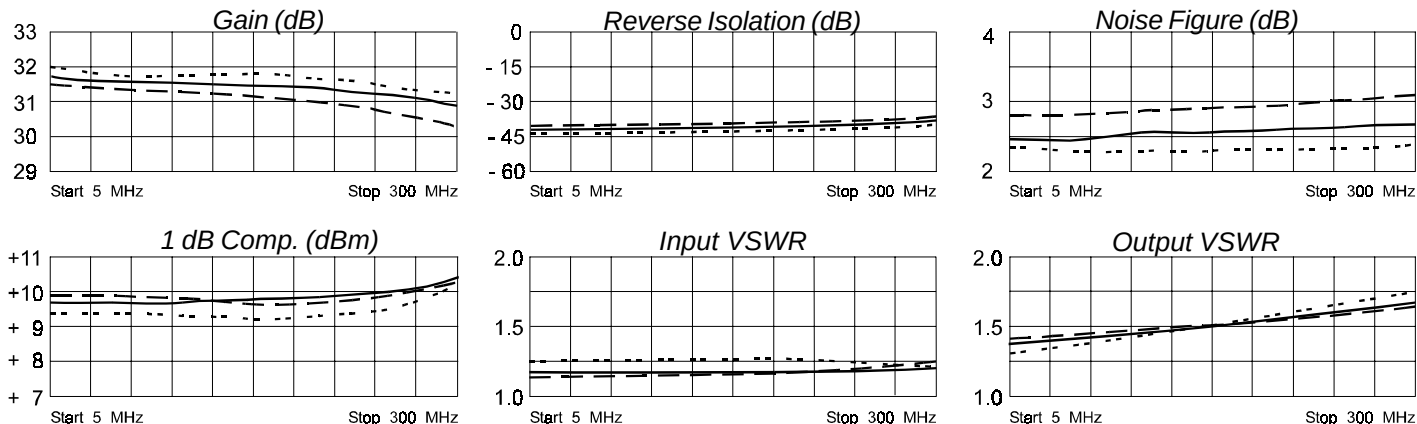
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +37 (Typ.)
 Second Order Two Tone Intercept Point +32 (Typ.)
 Third Order Two Tone Intercept Point +21 (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 + 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	.11	-183	36.70	3	.01	7	.17	-174
10	.10	-173	36.76	- 3	.01	4	.17	-177
50	.10	182	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

Amplifonix

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