

# RF AMPLIFIER

## MODEL *TM7279*

Available as: TM7279, 4 Pin TO-8 (T4)  
 TN7279, 4 Pin Surface Mount (SM3)  
 FP7279, 4 Pin Flatpack (FP4)  
 BX7279, Connectorized Housing (H1)

### Features

- High Output Power: +23 dBm Typical
- High Third Order Intercept: +36 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 - 250 MHz
Gain (dB)	14	12.5 Min.
Power @ 1 dB Comp. (dBm)	+23	+21 Min.
Reverse Isolation (dB)	-15.5	-14.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.5	6.0 Max.
Power Vdc	+15	+15 Min.
mA	90	95 Max.

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

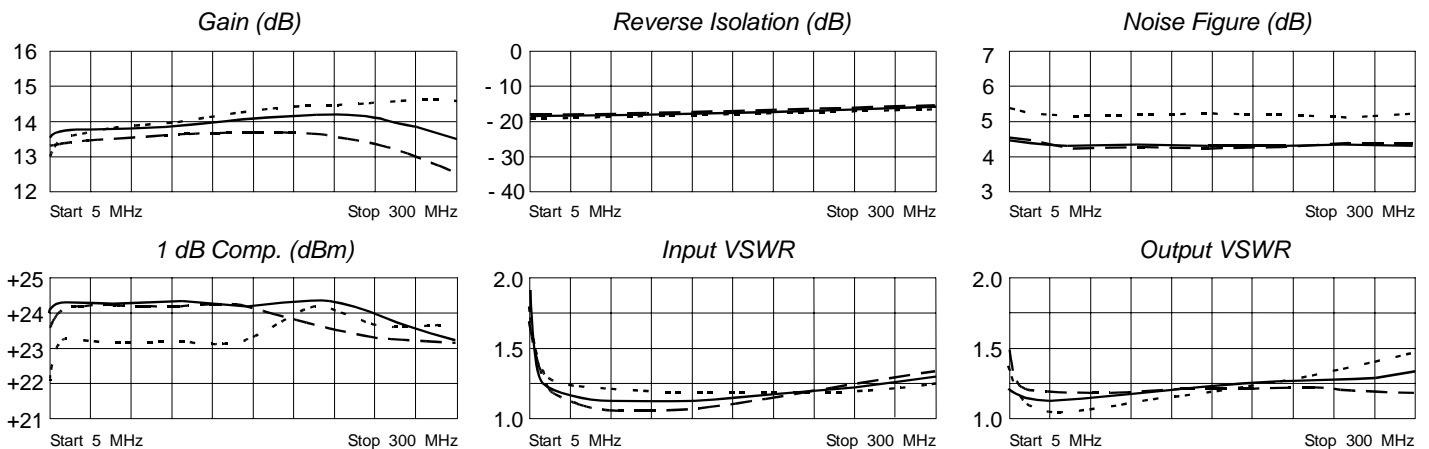
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +52 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +46 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +36 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
5	.18	-95	4.98	-164	.1105	12	.19	158
20	.07	-149	5.13	179	.1128	4	.14	169
50	.05	169	5.17	167	.1167	1	.13	172
100	.03	123	5.21	151	.1190	-0	.13	170
150	.03	63	5.30	135	.1252	-2	.12	160
200	.06	-11	5.40	116	.1312	-6	.11	141
250	.11	-55	5.40	96	.1433	-11	.10	90
300	.16	-96	5.05	72	.1459	-20	.16	24



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