

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.

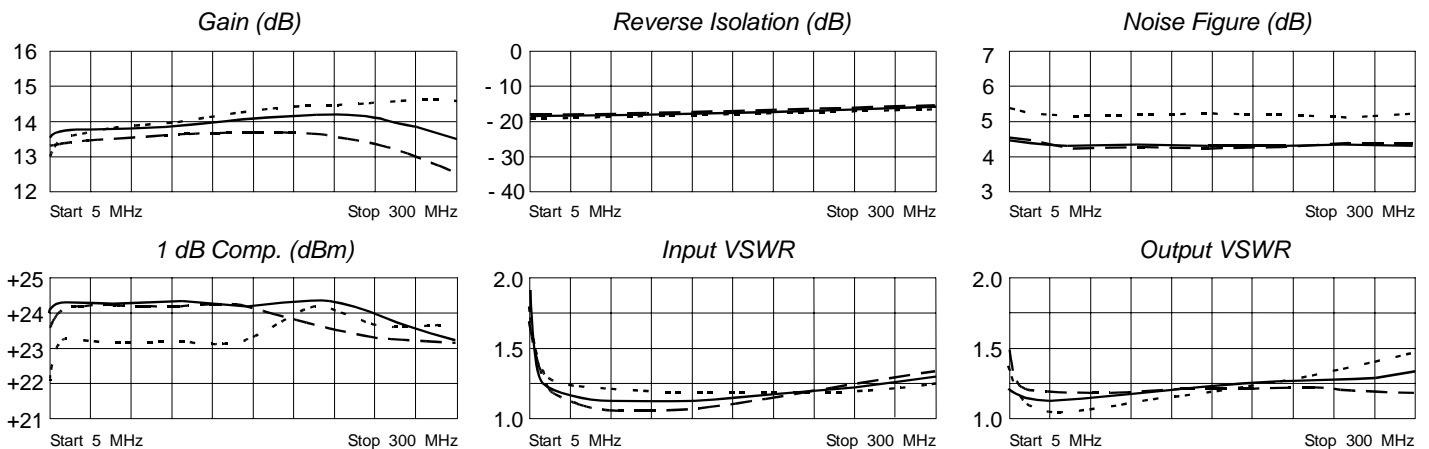
Typical Intermodulation Performance at 25 ° C

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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 03/07/05

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