

RF AMPLIFIER

MODEL *TM7277*

Available as: TM7277, 4 Pin TO-8 (T4)
 TN7277, 4 Pin Surface Mount (SM3)
 FP7277, 4 Pin Flatpack (FP4)
 BX7277, Connectrized Housing (H1)

Features

- High Output Power: +24 dBm Typical
- High Third Order Intercept: +41 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	5-250 MHz	5-250 MHz
Gain (dB)	10.5	9.5 Min.
Power @ 1 dB Comp. (dBm)	+24	+20.0 Min.
Reverse Isolation (dB)	-12.5	-11.5 Max.
VSWR In Out	<1.5:1 <1.75:1	2.0:1 Max. 2.0:1 Max.
Noise Figure (dB)	4.0	5.0 Max.
Power Vdc mA	+15 70	+15 Min. 75 Max.

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

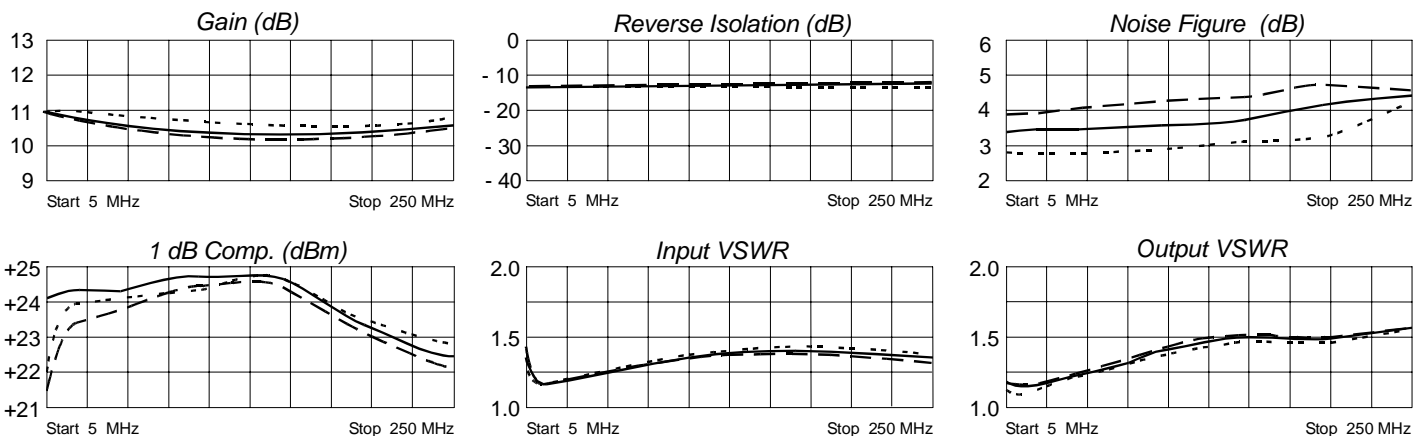
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point..... +54 dBm (Typ.)
 Second Order Two Tone Intercept Point..... +48 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +41 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	.15	-105	3.56	-170	.21	-173	.08	-93
10	.09	-118	3.53	-180	.22	179	.07	-125
50	.09	-122	3.43	152	.22	151	.11	-146
100	.14	-126	3.34	123	.22	122	.17	-177
150	.17	-132	3.32	96	.23	96	.20	142
200	.18	-134	3.32	67	.24	70	.21	93
250	.17	-130	3.37	38	.24	47	.24	38



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