

# 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

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +54(Typ.)  
 Second Order Two Tone Intercept Point ..... +48(Typ.)  
 Third Order Two Tone Intercept Point ..... +41(Typ.)

### Specifications

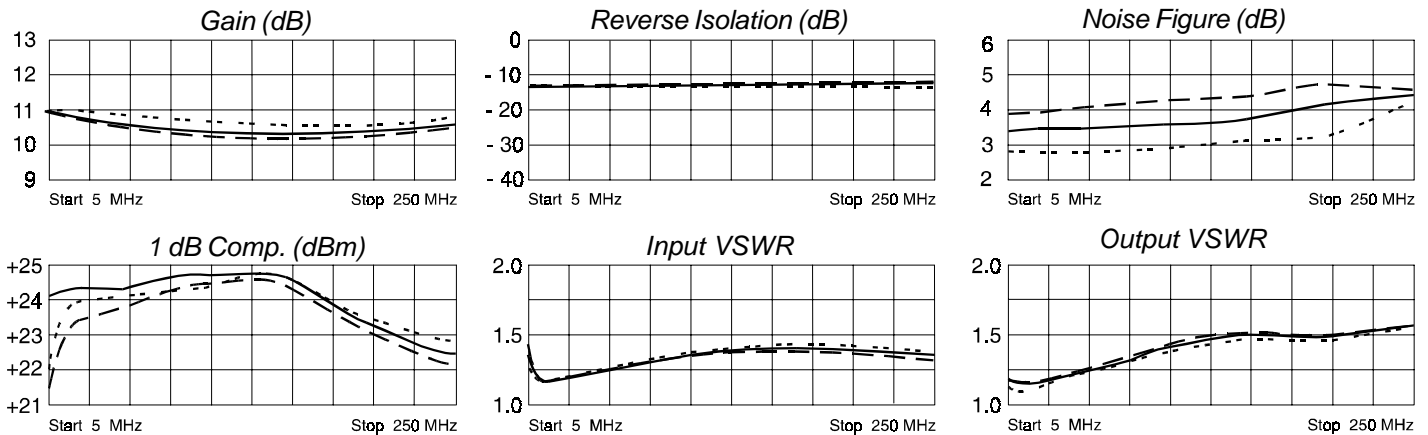
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 250 MHz	5 - 250 MHz
Gain (dB)	10.5	9.5 Min.
Power @ 1 dB Comp. (dBm)	+24	+20.0 Min.
Reverse Isolation (dB)	- 12.5	- 11.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15
mA	70	75 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 ..... + 18 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	.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	36



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 •••• FAX 215-464-4001

10/22/02