

RF AMPLIFIER MODEL *TM9777*

Available as: TM9777, 4 Pin TO-8 (T4)
TN9777, 4 Pin Surface Mount (SM3)
FP9777, 4 Pin Flatpack (FP4)
BX9777, Connectorized Housing (H1)

Features

- High Output Power: +23 dBm Typical
- Low Noise Figure: 3.3 dB Typical
- Operating Temperature: -55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 2700 MHz	10 - 2500 MHz
Gain (dB)	11.0	10.0 Min.
Power @ 1 dB Comp. (dBm)	+23	+22 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	1.75:1	2.0:1 Max.
VSWR Out	1.75:1	2.0:1 Max.
Noise Figure (dB)	3.3	4.5 Max.*
Power Vdc	+15	+15
mA	115	120 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 +37 dBm (Typ.)

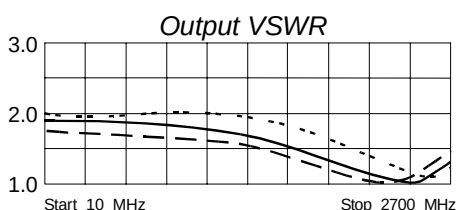
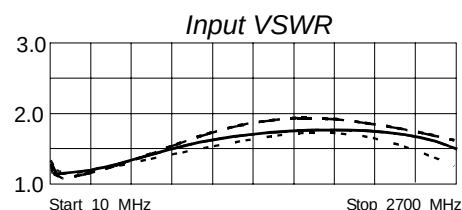
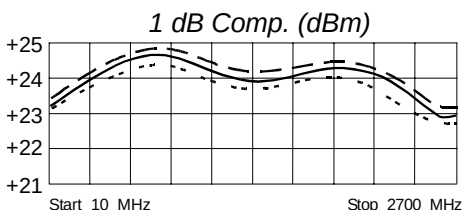
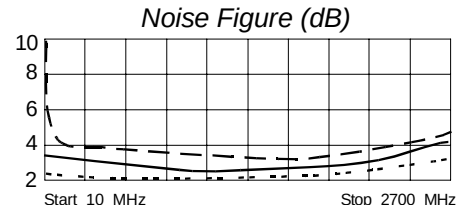
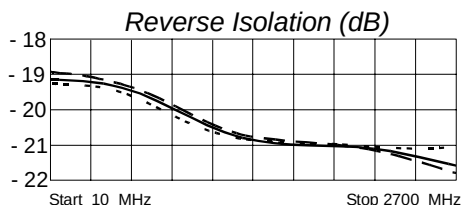
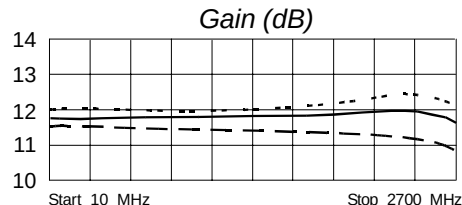
Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
Storage Temperature -62°C to + 125 °C
Case Temperature + 125 °C
DC Voltage + 17 Volts
Continuous RF Input Power + 20 dBm
Short Term RF Input Power ... 250 Milliwatts (1 Minute Max.)
Maximum Peak Power 0.5 Watt (3 µsec Max.)

* Noise Figure may be higher at Freq. below 100 MHz

Legend ——— + 25 °C - - - - + 85 °C - - - - -55 °C

Typical Performance Data



Linear S-Parameters

Freq. MHz	---S11---		---S21---		---S12---		---S22---	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.16	-122	3.79	-168	.11	4	.30	180
30	.12	-156	3.90	-178	.11	0	.29	177
100	.12	-173	3.92	172	.11	-5	.29	169
500	.17	169	3.85	133	.11	-28	.29	127
900	.23	144	3.83	96	.09	-50	.28	91
1300	.27	110	3.81	59	.09	-71	.26	61
1700	.26	70	3.98	18	.09	-96	.19	29
2100	.23	18	4.03	-30	.09	-123	.04	-22
2500	.19	-40	3.54	-84	.09	-152	.21	141
2700	.18	-70	3.26	-112	0.8	-166	.32	120



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