

RF AMPLIFIER

MODEL *TM9711*

Available as: TM9711, 4 Pin TO-8 (T4)
 TN9711, 4 Pin Surface Mount (SM3)
 FP9711, 4 Pin Flatpack (FP4)
 BX9711, Connectorized Housing (H1)

Features

- 6 Volt Operation
- Low Noise Figure: 2.2 dB 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	1000 - 2000 MHz	1000 - 2000 MHz
Gain (dB)	12	10 Min.
Power @ 1 dB Comp. (dBm)	+16	+15 Min.
Reverse Isolation (dB)	-18	-17 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<2.2	3.0 Max.
VSWR Vdc	+6	+6
mA	62	70 Max.

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

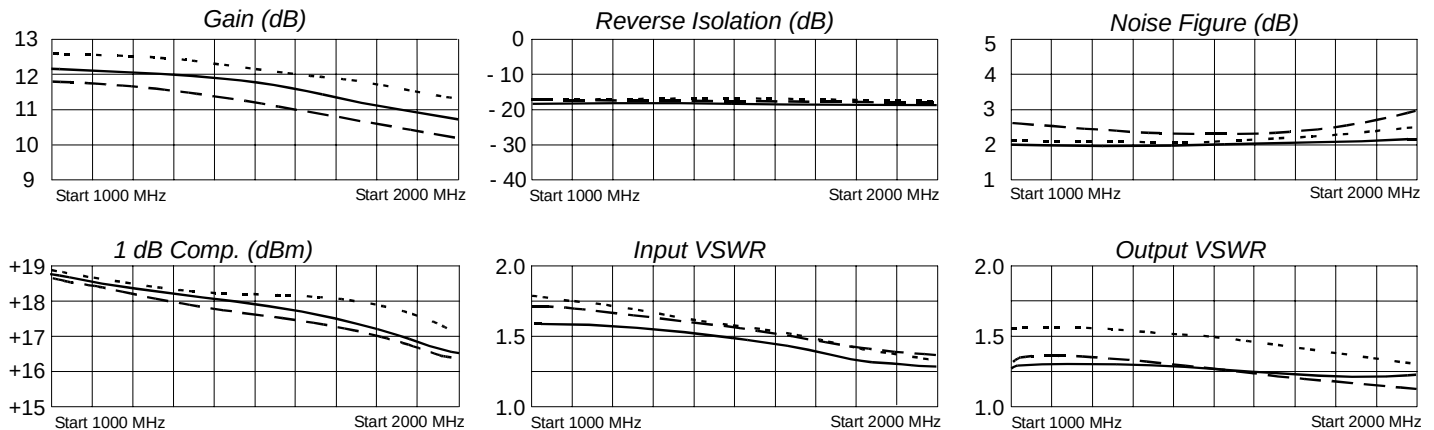
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point..... +41 dBm (Typ.)
 Second Order Two Tone Intercept Point +35 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 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 + 8 Volts
 Continuous RF Input Power +10 dBm
 Short Term RF Input Power.....20 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.05 Watt (3 µsecMax.)

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.
800	.28	- 36	4.49	146	.09	- 13	.10	-152
1000	.26	- 51	4.41	133	.09	- 21	.12	-162
1200	.24	- 67	4.31	122	.10	- 30	.13	-172
1400	.22	- 86	4.13	110	.10	- 39	.12	-171
1600	.20	-105	3.94	98	.10	- 50	.10	-152
1800	.18	-126	3.73	87	.11	- 59	.07	-116
2000	.16	-149	3.49	77	.11	- 73	.09	58



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 08/24/00

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