

RF AMPLIFIER

MODEL *TM6609*

Available as: TM6609, 4 Pin TO-8 (T4)
 TN6609, 4 Pin Surface Mount (SM3)
 FP6609, 4 Pin Flatpack (FP4)
 BX6609, Connectorized Housing (H1)

Features

- High Output Power: +22 dBm Typical
- 24 Volt Operation

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.)

Specifications

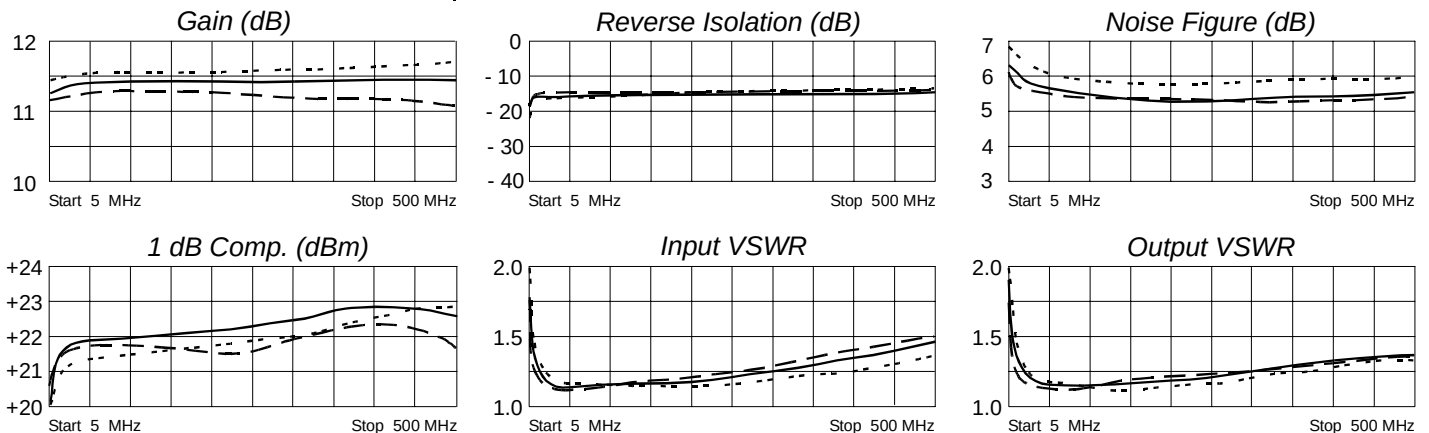
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	11.5	10.0 Min.
Power @ 1 dB Comp. (dBm)	+22	+20.0 Min.
Reverse Isolation (dB)	-15	-14 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	5.5	7.0 Max.
Power Vdc	+24	+24
mA	88	95 Max.

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

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 27 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	.31	- 51	3.70	-154	.12	32	.39	113
50	.05	-112	3.65	175	.16	2	.07	110
100	.06	-121	3.66	166	.16	- 1	.07	102
200	.08	-121	3.66	149	.16	- 2	.09	81
300	.11	-127	3.65	133	.17	- 5	.11	71
400	.15	-134	3.67	117	.17	- 8	.14	59
500	.19	-142	3.66	101	.17	-12	.16	49



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/16.04

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