

RF AMPLIFIER

MODEL *TM6112*

Available as: TM6112, 4 Pin TO-8 (T4)
 TN6112, 4 Pin Surface Mount (SM3)
 FP6112, 4 Pin Flatpack (FP4)
 BX6112, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.0 dB Typical
- Medium Output Power: +14.5 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	10 - 200 MHz	10 - 200 MHz
Gain (dB)	16.4	15.5 Min.
Power @ 1 dB Comp. (dBm)	+14.5	+12.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise Figure (dB)	2.0	3.0 Max.
Power Vdc	+15	+15
mA	27	30 Max.

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

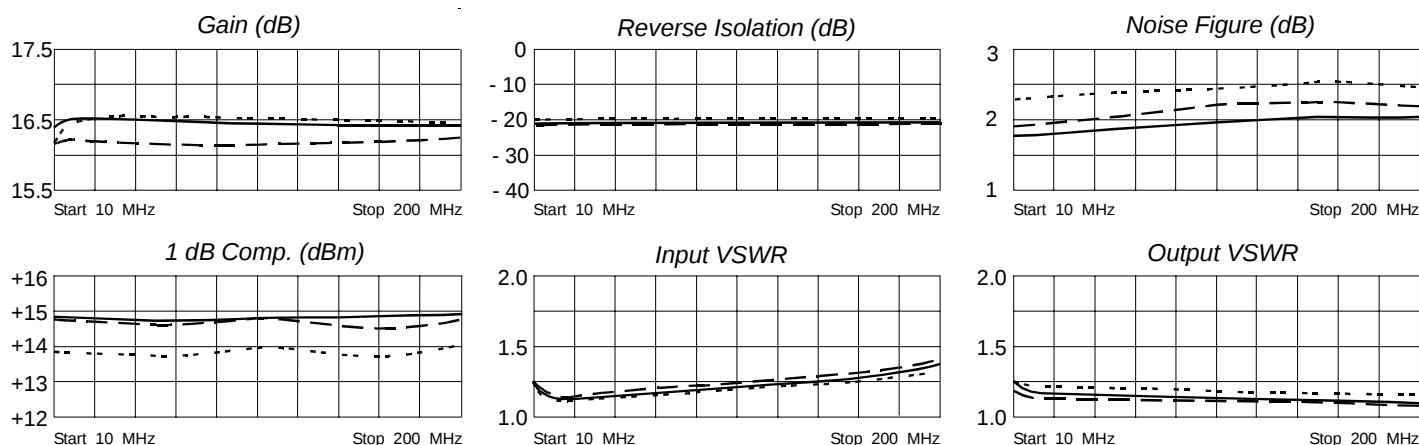
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +43 dBm (Typ.)
 Second Order Two Tone Intercept Point +38 dBm (Typ.)
 Third Order Two Tone Intercept Point +28 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 + 13 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.11	- 74	6.66	-172	.09	-172	.13	- 42
50	.06	- 84	6.67	168	.09	167	.08	- 23
100	.09	- 99	6.65	154	.09	151	.07	- 29
150	.12	-113	6.62	140	.09	136	.06	- 40
200	.18	-125	6.63	125	.10	123	.05	- 72
250	.25	-139	6.59	110	.10	108	.04	-122



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 06/22/04

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