

RF AMPLIFIER

MODEL **TM6121**

Available as: TM6121, 4 Pin TO-8 (T4)
 TN6121, 4 Pin Surface Mount (SM3)
 FP6121, 4 Pin Flatpack (FP4)
 BX6121, Connectorized Housing (H1)
 PN6121, Reduced Size Surface Mount (SM11)

Features

- High Intercept: > +37 dBm Typical
- Low Noise Figure: < 3 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +60 (Typ.)
 Second Order Two Tone Intercept Point +55 (Typ.)
 Third Order Two Tone Intercept Point +38 (Typ.)

Specifications

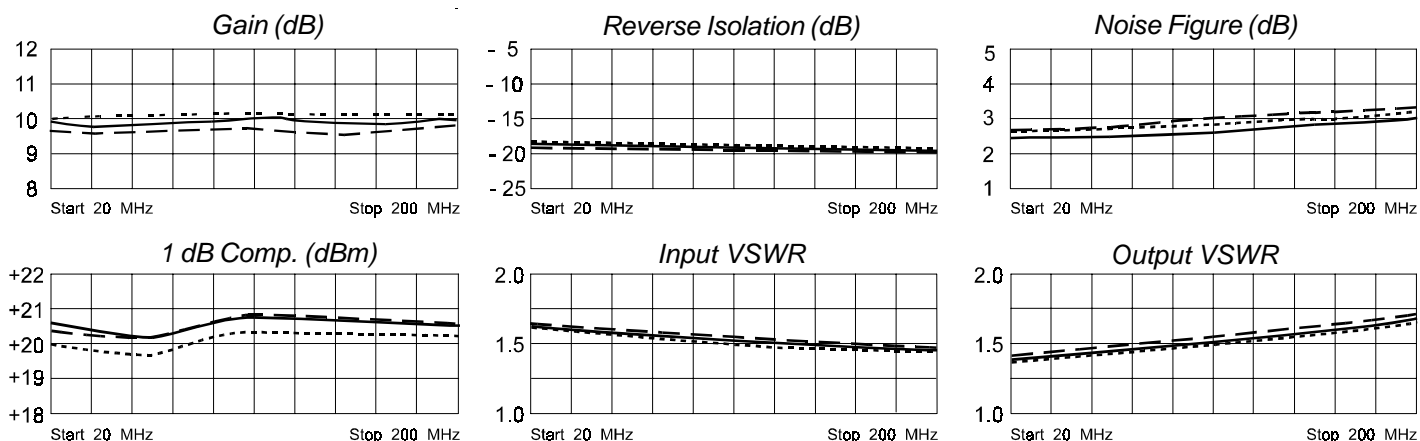
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 200 MHz	20 - 200 MHz
Gain (dB)	10	10 ± .6
Power @ 1 dB Comp. (dBm)	+20	+18.0 Min.
Reverse Isolation (dB)	- 18	- 17 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3	4.0 Max.
Power Vdc	+15	+15
mA	60	70 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 + 17 dBm
 Short Term RF Input Power 200 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
10	.20	-148	3.10	-174	.11	-175	.21	-189
20	.19	-166	3.12	178	.12	176	.22	-176
50	.18	176	3.09	185	.11	183	.22	176
100	.18	161	3.07	147	.11	143	.23	-165
150	.18	151	3.08	130	.11	126	.24	155
200	.20	139	3.10	112	.11	108	.24	148
300	.25	108	3.01	71	.09	78	.30	143



2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 ···· FAX 215-464-4001 Rev. B 09/17/01