

# RF AMPLIFIER

## MODEL *TM6155*

Available as: TM6155, 4 Pin TO-8 (T4)  
 TN6155, 4 Pin Surface Mount (SM3)  
 FP6155, 4 Pin Flatpack (FP4)  
 BX6155, Connectorized Housing (H1)

### Features

- Medium Gain: 12.5 dB Typical
- High Output Power: +19.5 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	300 - 1000 MHz	300 - 1000 MHz
Gain (dB)	12.5	10.5 Min.
Power @ 1 dB Comp. (dBm)	+19.5	+18.0 Min.
Reverse Isolation (dB)	-13	-12 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<2.0:1	3.0:1 Max.
Noise Figure (dB)	<4.0	5.5 Max.
Power Vdc	+15	+15
mA	50	60 Max.

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

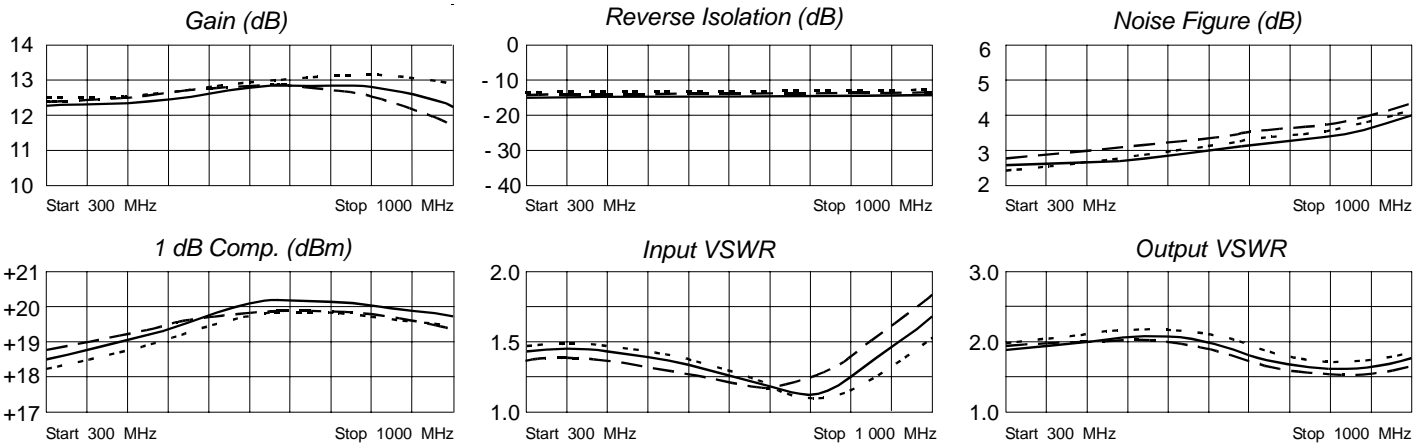
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+51 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+45 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+33 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 ..... + 10 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
200	.18	91	4.15	144	.17	148	.28	8
300	.18	56	4.16	126	.18	130	.31	1
400	.18	23	4.16	107	.18	115	.33	- 9
500	.17	- 10	4.26	88	.18	99	.34	- 23
600	.13	- 47	4.34	69	.19	83	.33	- 39
800	.08	172	4.42	25	.21	48	.25	- 87
1000	.25	52	4.15	- 23	.22	7	.21	173



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 06/29/04

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