

# RF AMPLIFIER

## MODEL *TM5155*

Available as: TM5155, 4 Pin TO-8 (T4)  
 TN5155, 4 Pin Surface Mount (SM3)  
 FP5155, 4 Pin Flatpack (FP4)  
 BX5155, Connectorized Housing (H1)

### Features

- High 3rd Order Intercept: +37 dBm Typical
- Medium Gain: 15 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	5 - 300 MHz	5 - 300 MHz
Gain (dB)	15.0	15.0 ± 1.0 Min.
Power @ 1 dB Comp. (dBm)	>+22	+21 Min.
Reverse Isolation (dB)	- 17	- 16 Max.
VSWR In Out	<1.75:1 <1.75:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	<5	6.0 Max.
Power Vdc mA	+15 85	+15 90 Max.

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

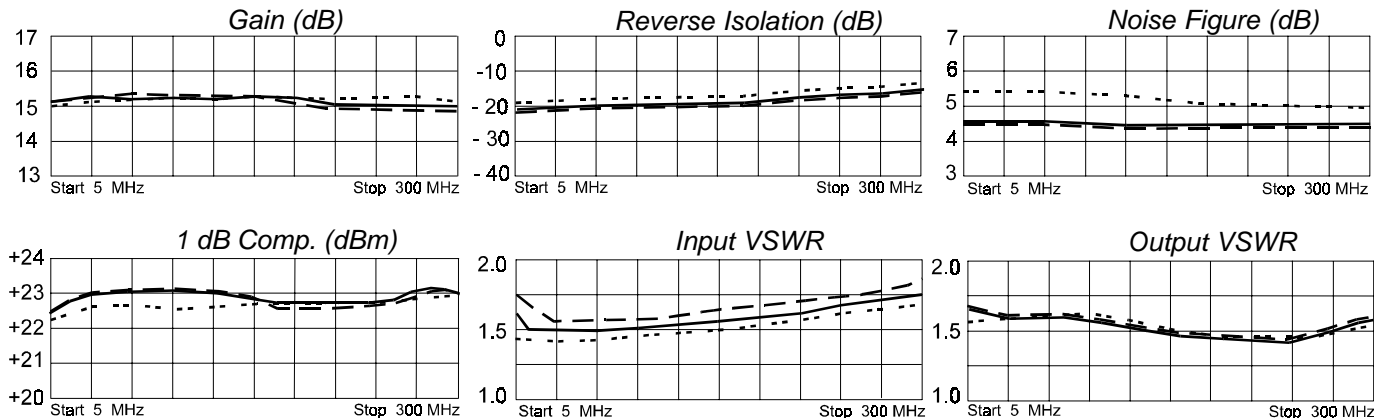
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +54 (Typ.)  
 Second Order Two Tone Intercept Point ..... +48 (Typ.)  
 Third Order Two Tone Intercept Point ..... +37 (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 17Volts  
 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



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	.24	-30	5.73	-168	.080	15	.25	53
10	.20	-20	5.86	-175	.082	8	.23	25
50	.19	-19	5.86	168	.094	5	.22	-15
100	.18	-33	5.90	162	.101	4	.19	-41
150	.20	-50	5.88	137	.108	5	.18	-68
200	.21	-71	5.87	122	.120	3	.15	-105
300	.24	-111	5.59	91	.143	-5	.18	-163

# Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001 3/13/03