

# RF AMPLIFIER

## MODEL *TM6157*

Available as: TM6157, 4 Pin TO-8 (T4)  
 TN6157, 4 Pin Surface Mount (SM3)  
 FP6157, 4 Pin Flatpack (FP4)  
 BX6157, Connectorized Housing (H1)

### Features

- Medium Gain: 13 dB Typical
- High Output Power: +22 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +52 (Typ.)  
 Second Order Two Tone Intercept Point ..... +45 (Typ.)  
 Third Order Two Tone Intercept Point ..... +33 (Typ.)

### Specifications

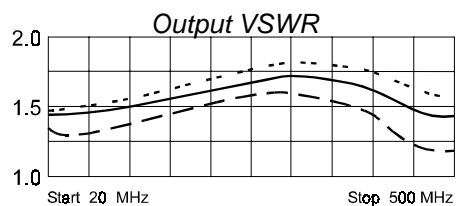
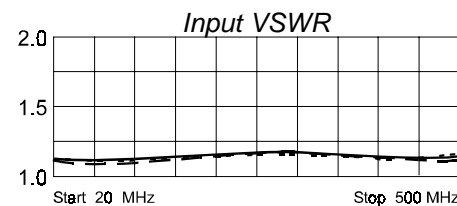
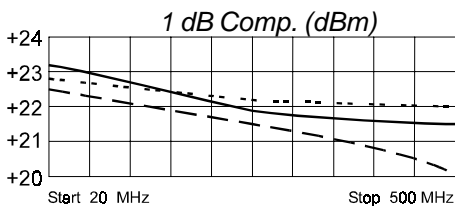
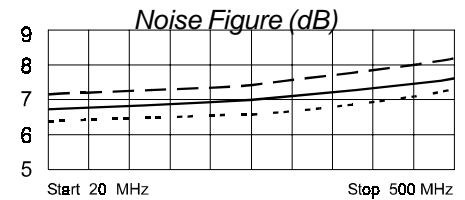
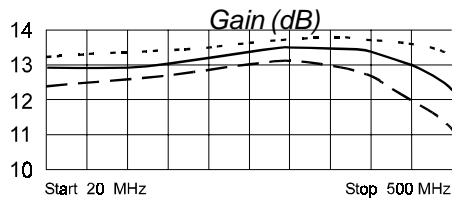
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	20 - 500 MHz	20 - 500 MHz
Gain (dB)	13	10.5 Min.
Power @ 1 dB Comp. (dBm)	+22	+20.0 Min.
Reverse Isolation (dB)	- 23.5	- 22.5 Max.
VSWR In	<1.2:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<7.5	8.5 Max.
Power Vdc	+15	+15
mA	75	85 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 ..... + 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



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	.06	-138	4.40	-170	.06	-170	.18	- 13
20	.05	-156	4.42	-180	.06	-179	.17	- 11
100	.06	-157	4.41	152	.06	150	.19	- 39
200	.08	-158	4.50	122	.06	122	.23	- 78
300	.09	-175	4.83	89	.06	91	.26	-117
400	.08	158	4.57	51	.06	68	.23	-164
500	.05	101	4.04	10	.05	42	.16	107



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