

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

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.

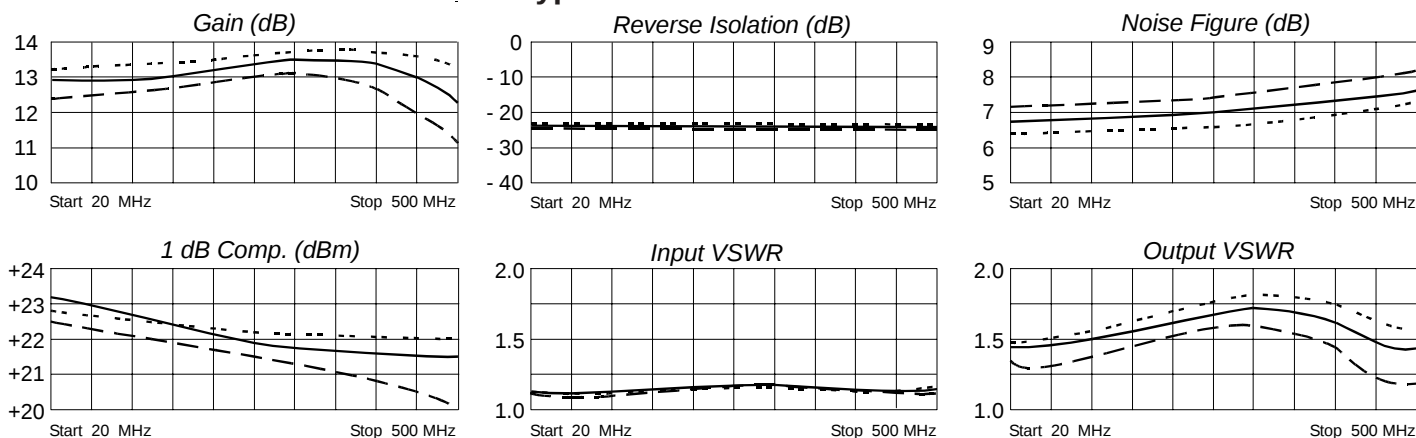
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+52 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 + 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	.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	4.63	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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