

RF AMPLIFIER

MODEL *TM6189*

Available as: TM6189, 4 Pin TO-8 (T4)
 TN6189, 4 Pin Surface Mount (SM3)
 FP6489, 4 Pin Flatpack (FP4)
 BX6189, Connectorized Housing (H1)

Features

- High Gain: 22 dB Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+42 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+35 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+30 dBm (Typ.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	50 - 800 MHz	100 - 800 MHz
Gain (dB)	22	20.5 Min.
Gain Flatness (dB)	±0.5	±1.0 Max.
Gain Variation (dB)	1.3	—
IP3 (dBm)*	+30	+25 Min.
IP2 (dBm)*	+35	+30 Min.
IP2H (dBm)	+42	+37 Min
Power @ 1 dB Comp. (dBm)	+17.5	+16 Min.
Reverse Isolation (dB)	-29	-25 Max.
VSWR In	1.4:1	2.2:1 Max.
Out	1.4:1	2.2:1 Max.
Noise Figure (dB)	4.5	6.0 Max.
Power Vdc	+15	+15
mA	45	50 Max.

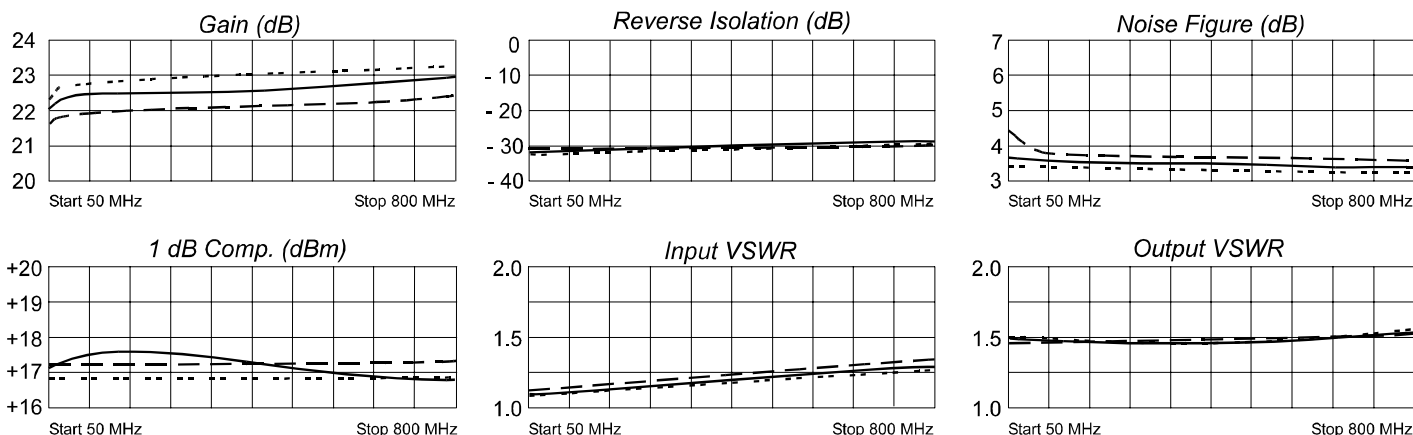
Note: Care should always be taken to effectively ground the case of each unit.

* IP3 and IP2 are in band output intercept points.

Absolute Maximum (No Damage) Ratings

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



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