

# RF AMPLIFIER

## MODEL *TM5186*

Available as: TM5186, 4 Pin TO-8 (T4)  
 TN5186, 4 Pin Surface Mount (SM3)  
 FP5186, 4 Pin Flatpack (FP4)  
 BX5186, Connectorized Housing (H1)

Preliminary

### Features

- Output Power: +21.5 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+60 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+55 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+37 dBm (Typ.)

### Specifications

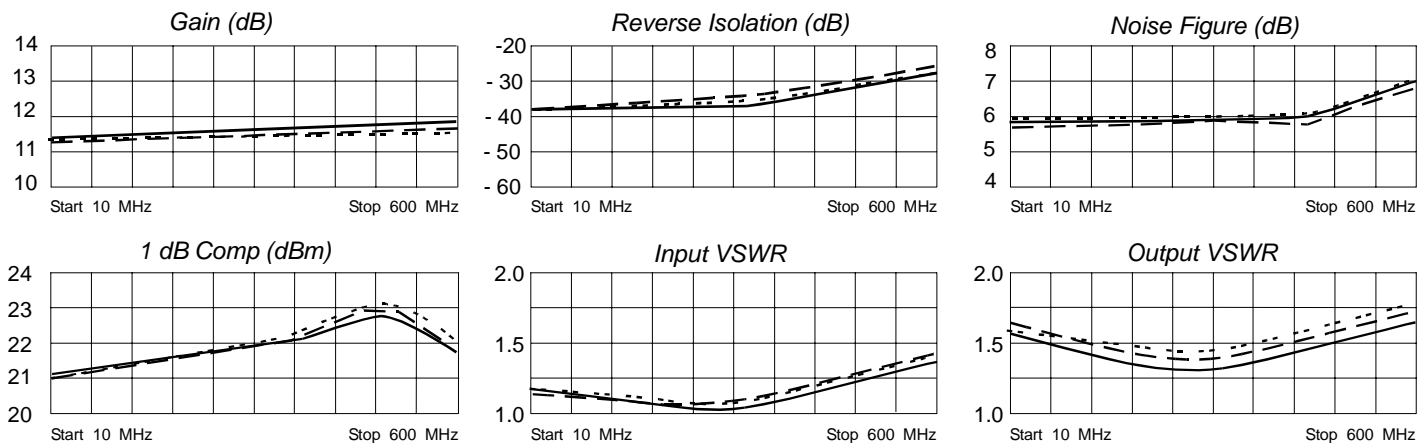
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10-600 MHz	10-600 MHz
Gain (dB)	11.5	11.0 Min.
Power @ 1 dB Comp. (dBm)	+21.5	+20.5 Min.
Reverse Isolation (dB)	-23	-22 Min.
VSWR In	1.3:1	1.5:1 Max.
Out	1.8:1	2.0:1 Max.
Noise Figure (dB)	6.0	8.0 Max.
Power Vdc	+15	+15 Min.
mA	100	105 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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/22/05

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