

# RF AMPLIFIER

## MODEL *TM5180*

Available as: TM5180, 4 Pin TO-8 (T4)  
 TN5180, 4 Pin Surface Mount (SM3)  
 FP5180, 4 Pin Flatpack (FP4)  
 BX5180, Connectorized Housing (H1)

### Features

- Low Noise Figure: 3 dB Typical
- High Gain: 29 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC              | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|-----------------------------|----------------------|----------------------------------|
| Frequency                   | 5 - 150 MHz          | 10 - 150 MHz                     |
| Gain (dB)                   | 29                   | 28 Min.                          |
| Power @ 1 dB<br>Comp. (dBm) | +18.0                | +17.0 Min.                       |
| Reverse<br>Isolation (dB)   | -35                  | -33 Max.                         |
| VSWR In                     | 1.6:1                | 2.0:1 Max.                       |
| Out                         | 1.6:1                | 2.0:1 Max.                       |
| Noise Figure (dB)           | 3.0                  | 4.0 Max.                         |
| Power Vdc                   | +15                  | +15 Min.                         |
| mA                          | 35                   | 40 Max.                          |

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

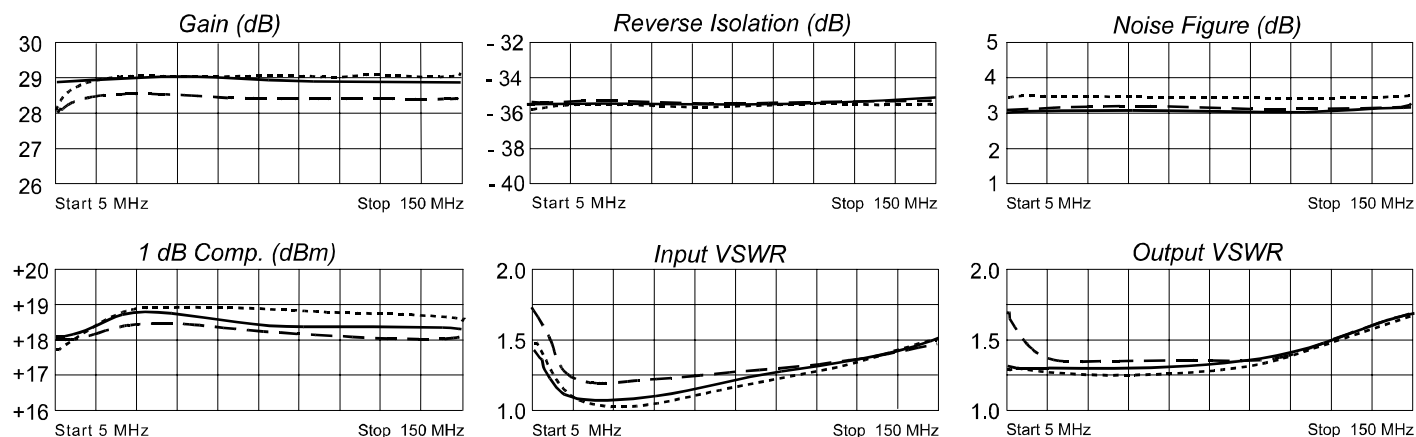
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+44 dBm (Typ)  
 Second Order Two Tone Intercept Point.....+42 dBm (Typ)  
 Third Order Two Tone Intercept Point.....+32 dBm (Typ)

### Maximum Ratings

Ambient Operating Temperature .....-55°C to +125 °C  
 Storage Temperature .....-62°C to +150 °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 Watts ( 3 μsecMax.)

### Typical Performance Data



Legend ——— +25 °C    - - - +85 °C    . . . . . -55 °C



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