

# RF AMPLIFIER

## MODEL TR3054

Available as: TR3054, 4 Pin TO-8B (T8)  
 RN3054, 4 Pin Surface Mount (SM19)  
 BR3054, Connectorized Housing (H2)

### Features

- High Gain: 24 dB Typical
- Output Power: 10.5 dBm Typical
- Operating Temp. - 30 °C to +65 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC              | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -30 °C to +65 °C |
|-----------------------------|----------------------|----------------------------------|
| Frequency                   | 40-100 MHz           | 40-100 MHz                       |
| Gain (dB)                   | 24                   | 23 Min.                          |
| Power @ 1 dB<br>Comp. (dBm) | 10.5                 | 10 Min.                          |
| Reverse<br>Isolation (dB)   | -15                  | -13 Max.                         |
| VSWR In                     | 1.5:1                | 2.0:1 Max.                       |
| Out                         | 1.5:1                | 2.0:1 Max.                       |
| Noise Figure (dB)           | 1.65                 | 1.75 Max.                        |
| Power Vdc                   | +15                  | +15 Min.                         |
| mA                          | 45                   | 60 Max.                          |

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

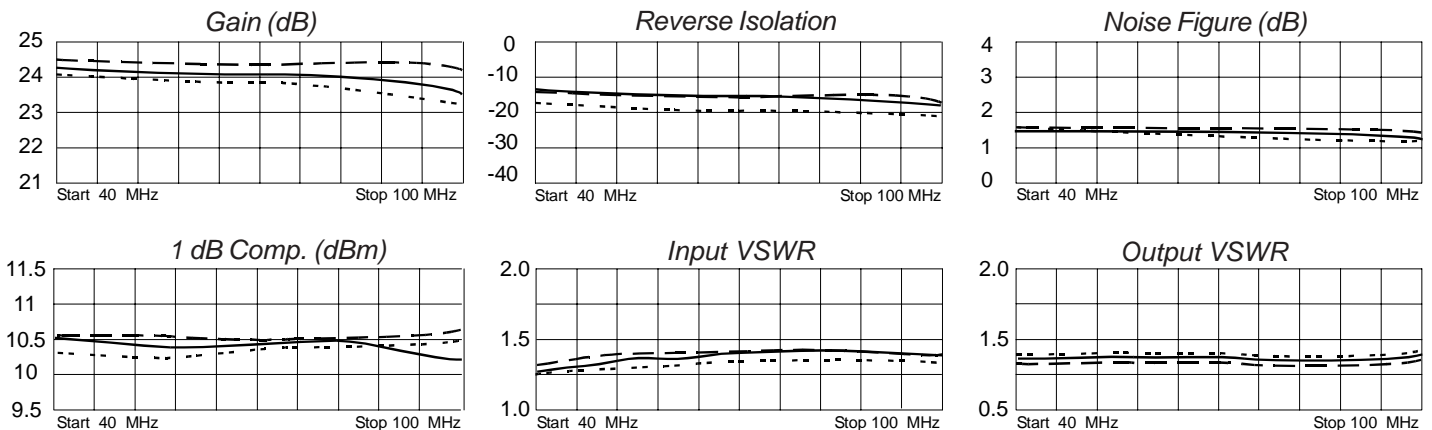
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+35 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+30 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+20 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



Legend ——— + 25 °C - - - + 65 °C - - - - - -30 °C



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