

# RF AMPLIFIER

## MODEL *TM3115*

Available as: TM3115, 4 Pin TO-8 (T4)  
 TN3115, 4 Pin .450" sq. Surface Mount (SM3)  
 BX3115, SMA Connectorized Housing (H1)

### Features

- Low Phase Noise Bipolar Design
- High Output Power: +27 dBm 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              |                 | 10 - 1400 MHz        | 10 - 1400 MHz                    |
| Gain                   |                 | 13.0 dB              | 11.5 dB Min.                     |
| Power @ 1 dB Comp.     | (10-1000 MHz)   | 27 dBm               | 25 dBm Min.                      |
|                        | (1000-1200 MHz) | 24 dBm               | 22 dBm Min.                      |
|                        | (1200-1400 MHz) | 22 dBm               | 20 dBm Min.                      |
| Reverse Isolation (dB) |                 | -17 dB               | -                                |
| VSWR                   | In              | 1.8:1                | 2.2:1 Max.                       |
|                        | Out             | 1.8:1                | 2.0:1 Max.                       |
| Noise Figure (dB)      |                 | 8.0 dB               | 10.0 dB Max.                     |
| Power                  | Vdc             | +15 volts            | +15 volts                        |
|                        | mA              | 195 mA               | 210 mA Max.                      |

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point ..... +40 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +35 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +30 dBm (Typ.)

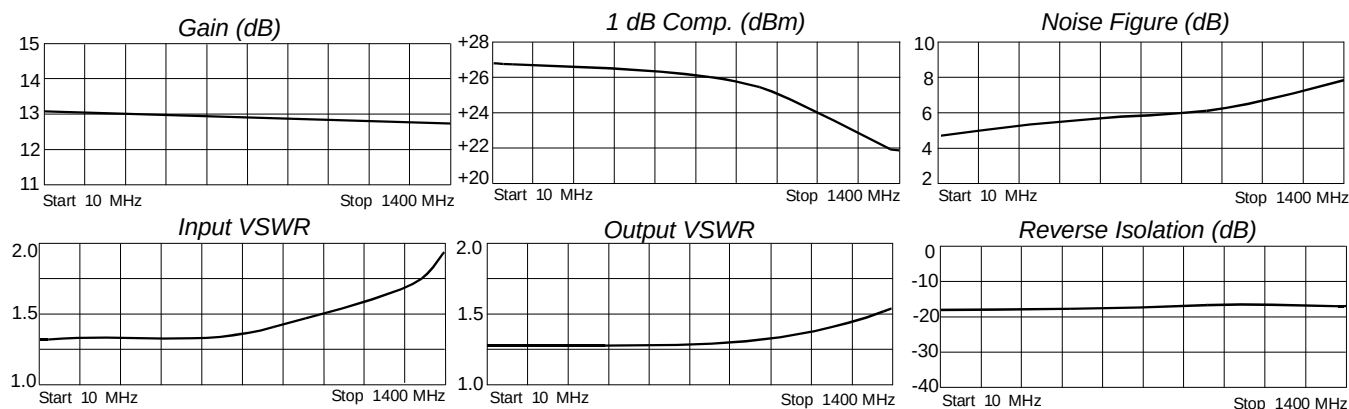
### Absolute (No Damage) Maximum Ratings

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 ..... +15 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.1 Watt (3 µsec Max.)

(Measured in a 50 Ohm system @ +15 Volts DC nominal unless otherwise noted)

Revision 9-3-2013

### Typical Performance Data



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

