

# RF AMPLIFIER

## MODEL *TM9064*

Available as: TM9064, 4 Pin 0.500" TO-8 (T4)  
 TN9064, 4 Pin 0.450" Sq. Surface Mount (SM3)  
 BX9064, SMA Connectorized Housing (H1L-Laser)  
 BXP9064, SMA Connectorized Housing (HPak)

### Features

- Ultra Broad Bandwidth 100-3000 MHz
- High Gain: 18.5 dB Typical
- Cross to the Cougar AC3064, our Model BX9064
- Cross to the Cougar ACP3064, our Model BXP9064
- Screening to the Tables of MIL-STD-883 Available

### Specifications

| CHARACTERISTIC                                       | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = -55 °C to +85 °C |
|------------------------------------------------------|----------------------|----------------------------------|
| Frequency                                            | 100 - 3000 MHz       | 100 - 3000 MHz                   |
| Gain                                                 | 18.5 dB              | 16.5 dB Min.                     |
| Gain Flatness                                        | +/- 0.3 dB           | +/- 0.8 dB Max.                  |
| Noise Figure (dB)<br>(400-3000 MHz)<br>(100-400 MHz) | 3.3 dB<br>4.5 dB     | 4.5 dB Max.<br>5.5 dB Max.       |
| VSWR In                                              | 1.5:1                | 2.0:1 Max.                       |
| VSWR Out                                             | 1.5:1                | 2.0:1 Max.                       |
| Power Output<br>@ 1 dB Comp. (dBm)                   | +16.5 dBm            | +15.0 dBm                        |
| Reverse<br>Isolation (dB)                            | -36 dB               | -                                |
| Power Vdc                                            | +15                  | +15                              |
| mA                                                   | 80                   | 88 Max.                          |

### Typical Intermodulation Performance at 25 °C

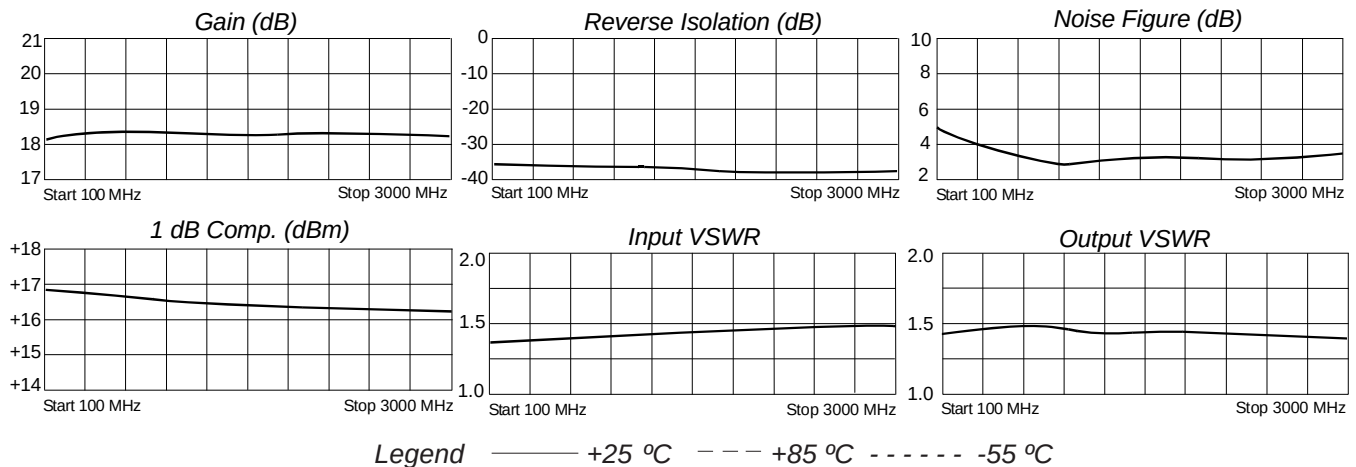
Second Order Harmonic Intercept Point.....+52 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+46 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+27 dBm (Typ.)  
 (Typical at 25°C under a +15 volt supply)

### 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 .... 100 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.  
 Revision 5/16/2012

### Typical Performance Data



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