

RF AMPLIFIER

MODEL TZ9204

Available as: TZ9204, 4 Pin TO-8 (T4)
 TN9204, 4 Pin Surface Mount (SM3)
 FP9204, 4 Pin Flatpack (FP4)
 BX9204, Connectorized Housing

Features

- Lower Cost
- High Gain: 20.5 dB Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +41 dBm (Typ.)
 Second Order Two Tone Intercept Point +35 dBm (Typ.)
 Third Order Two Tone Intercept Point +18 dBm (Typ.)

Specifications

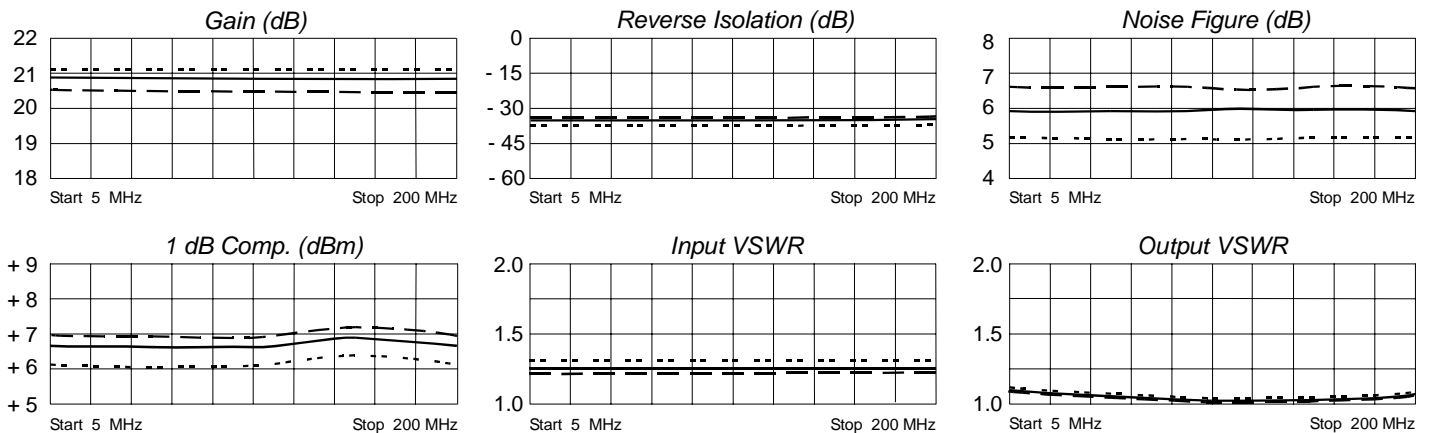
| CHARACTERISTIC | TYPICAL Ta= 25 °C | MIN/MAX Ta = -55 °C to +85 °C |
|-----------------------------|----------------------|----------------------------------|
| Frequency | 5 - 200 MHz | 5 - 200 MHz |
| Gain (dB) | 20.8 | 20.0 Min. |
| Power @ 1 dB Comp. (dBm) | +6.5 | +5.5 Min. |
| Reverse Isolation (dB) | -34 | -33 Max. |
| VSWR In | <1.25:1 | 2.0:1 Max. |
| VSWR Out | <1.25:1 | 2.0:1 Max. |
| Noise figure (dB) | <6.0 | 7.0 Max. |
| Power Vdc | +15 | +15 |
| mA | 37 | 40 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

Linear S-Parameters

| FREQ. MHz | S11 | | S21 | | S12 | | S22 | |
|--------------|-----|------|-------|------|-----|-----|-----|------|
| | Mag | Deg | Mag | Deg | Mag | Deg | Mag | Deg |
| 5 | .08 | -169 | 11.03 | 3 | .02 | 2 | .02 | - 45 |
| 50 | .08 | 171 | 11.03 | - 15 | .02 | - 4 | .02 | - 12 |
| 100 | .08 | 161 | 10.97 | - 31 | .02 | 6 | .01 | - 34 |
| 150 | .08 | 150 | 10.98 | - 47 | .02 | 3 | .01 | 177 |
| 200 | .08 | 139 | 11.00 | - 62 | .02 | 1 | .02 | 150 |



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Rev.
2/23/07

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