

# RF AMPLIFIER

## MODEL CZ8030

Available as: CZ8030, 3 Pin TO-39  
 TN8030, 4 Pin Surface Mount (SM3)  
 BX8030, SMA Connectorized Housing (H1)

### Features

- Lower Cost
- Operating Temp. 0 °C to +70 °C
- Environmental Screening Available

### Specifications

| CHARACTERISTIC              | TYPICAL<br>Ta= 25 °C | MIN/MAX<br>Ta = 0 °C to +70 °C |
|-----------------------------|----------------------|--------------------------------|
| Frequency                   | kHz - 400 MHz        | kHz - 400 MHz                  |
| Gain (dB)                   | 14                   | 13 Min.                        |
| Power @ 1 dB<br>Comp. (dBm) | +16                  | +14 Min.                       |
| Reverse<br>Isolation (dB)   | -15                  | -14 Max.                       |
| VSWR In                     | <1.5:1               | 3.0:1 Max.                     |
| Out                         | <1.5:1               | 2.5:1 Max.                     |
| Noise Figure (dB)           | 6.0                  | 7.0 Max.                       |
| Power Vdc                   | +5                   | +5                             |
| mA                          | 25                   | 28 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 ..... +32 dBm (Typ.)

Second Order Two Tone Intercept Point ..... +26 dBm (Typ.)

Third Order Two Tone Intercept Point ..... +21 dBm (Typ.)

### 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 ..... + 8 Volts

Continuous RF Input Power ..... + 8 dBm

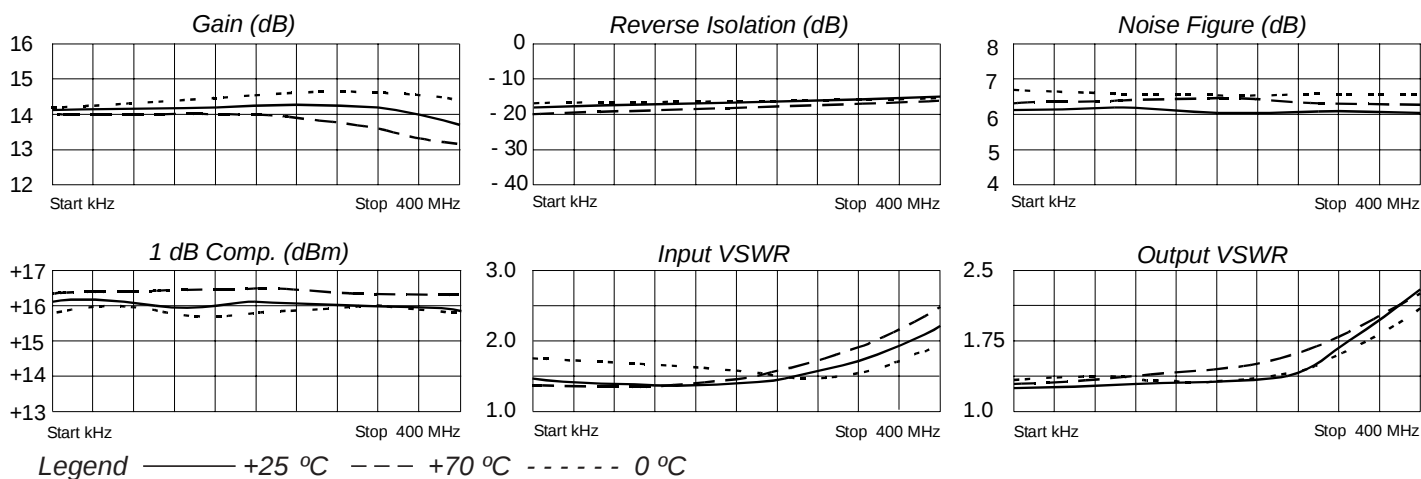
Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)

Maximum Peak Power ..... 0.5 Watt ( 3 µsec Max.)

\*Three external capacitors and a decoupling impedance are required. The decoupling impedance must be large in comparison to the 50 Ohm load to minimize gain reduction. The external capacitors determine the low frequency response of the amplifier.

\*Decoupling Impedance is 1 kOhm.

### Typical Performance Data



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