

# RF AMPLIFIER

## MODEL CZ8040

Available as: CZ8040, 3 Pin TO-39  
 TN8040, 4 Pin Surface Mount (SM3)  
 BX8040, SMA Connectorized Housing (H1)

### Features

- Lower Cost
- Lower Noise Figure: < 3.8 dB Typical
- Operating Temp. 0 °C to +70 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +70 °C
Frequency	kHz - 400 MHz	kHz - 300 MHz
Gain (dB)	19	18 Min.
Power @ 1 dB Comp. (dBm)	+9.5	+6.0 Min.
Reverse Isolation (dB)	-21	-20 Max.
VSWR In	<2.0:1	3.0:1 Max.
Out	<2.2:1	2.5:1 Max.
Noise figure (dB)	<3.8	4.5 Max.
Power Vdc	+3.5	+3.5 Min.
mA	25	28 Max.

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

### Typical Intermodulation Performance at 25 °C

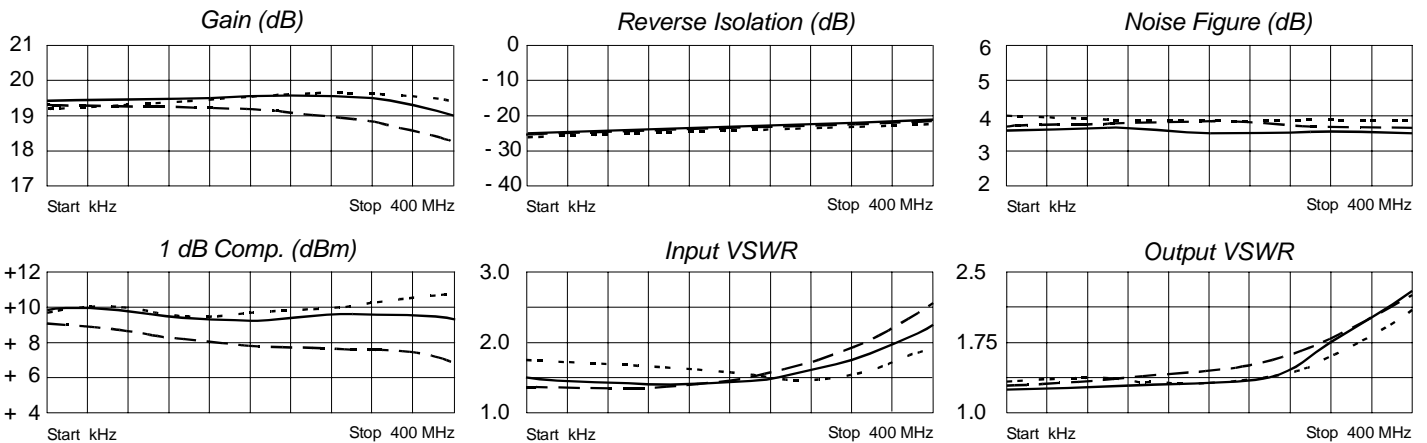
Second Order Harmonic Intercept Point ..... +32 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +26 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +21 dBm (Typ.)

### 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 ..... + 6 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



Legend ——— +25 °C    - - - +70 °C    ····· 0 °C



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