

RF AMPLIFIER

MODEL CZ8110

Available as: CZ8110, 3 Pin TO-39 (T10)

Features

- Replacement for the Motorola MWA 110
- Low Noise Figure: <4 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 - 400 MHz
Gain (dB)	15	13.0 Min.
Power @ 1 dB Comp. (dBm)	-0.2	-5.0 Min.
Reverse Isolation (dB)	-19	-18 Max.
VSWR In	<1.5:1	2.5:1 Max.
VSWR Out	<2.0:1	2.5:1 Max.
Noise figure (dB)	<4.0	5.5 Max.
Power Vdc	+3	+3
Power mA	10	12 Max.

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

Typical Intermodulation Performance at 25 °C

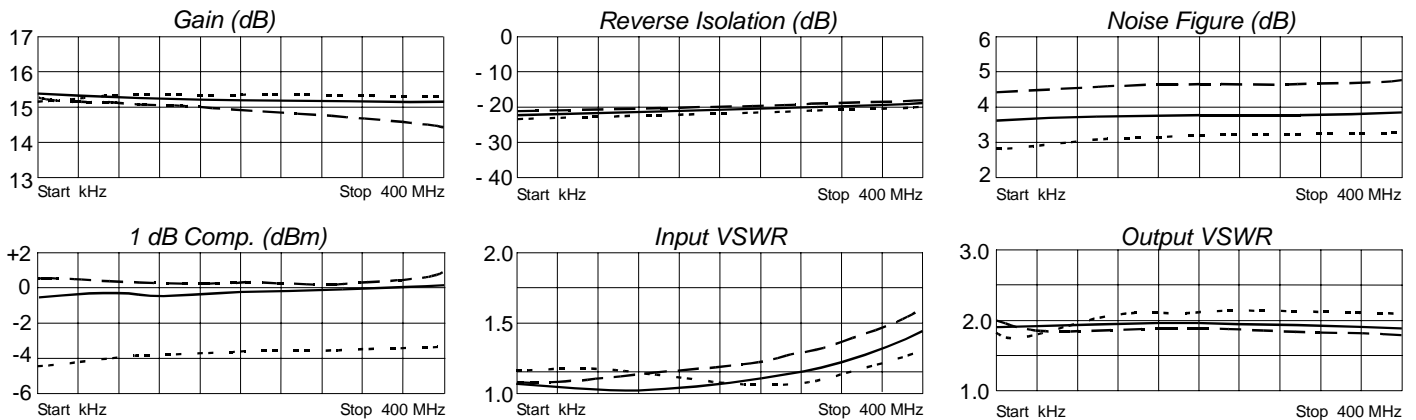
Second Order Harmonic Intercept Point +15 dBm (Typ.)
 Second Order Two Tone Intercept Point + 8 dBm (Typ.)
 Third Order Two Tone Intercept Point +10 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Current 25 mA
 Continuous RF Input Power + 6 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

* Decoupling Impedance is 1 kOhm

Typical Performance Data

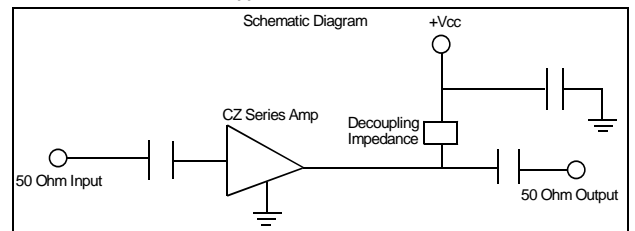


Legend ——— +25 °C - - - +70 °C ······ 0 °C

The CZ82X0 Series Amplifiers are designed for application in 50 ohm systems. 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. Data sheet curves are based on the noted decoupling impedance. The external capacitors determine the low frequency response of the Amplifier.

The CZ82X0 Series Amplifiers can be cascaded in series of two or more units without oscillation problems.

Application Information



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/23/04

www.SpectrumMicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001