

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. -55 °C to +125 °C
- Environmental Screening Available

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.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +125°C
Frequency	100 kHz - 400 MHz	100 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
mA	10	12 Max.

Absolute Maximum (No Damage) Ratings

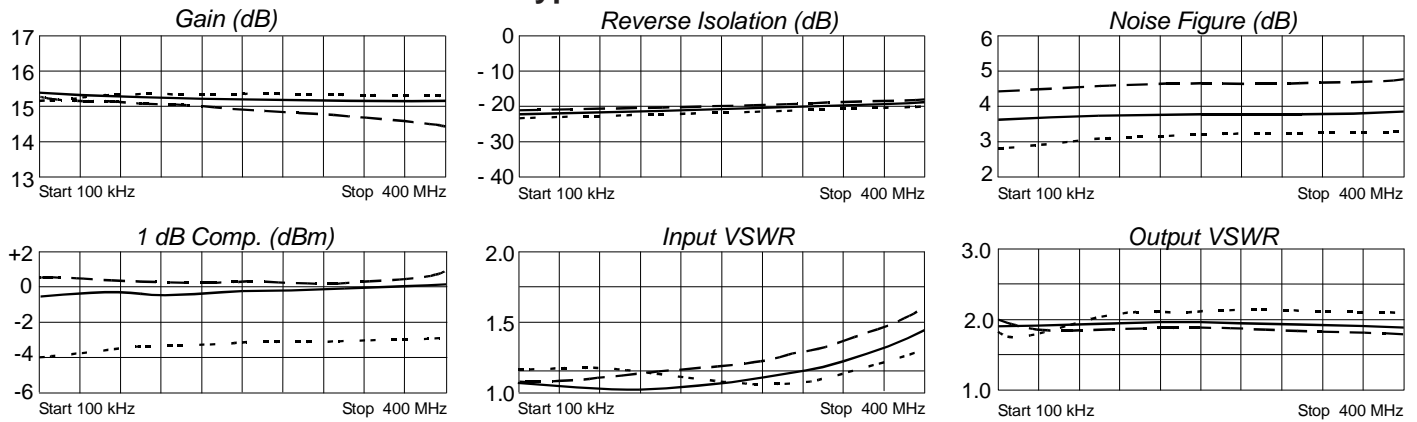
Ambient Operating Temperature -55°C to + 125 °C
 Storage Temperature -62°C to + 150 °C
 Case Temperature + 125 °C
 DC Voltage + 6 Volts
 DC Current 25 mA
 Continuous RF Input Power + 6 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Revision 6/2/2012

Decoupling Impedance is 1 kOhm

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

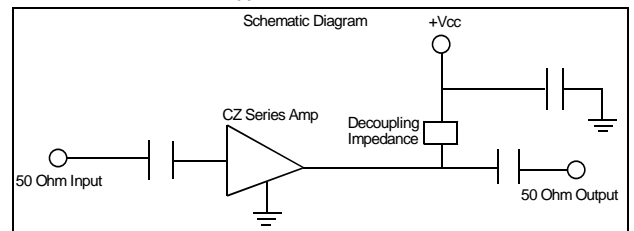
Typical Performance Data



Legend ——— +25 °C - - - +125 °C ····· -55 °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.

Application Information



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

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