

RF AMPLIFIER

MODEL CZ8120

Available as: CZ8120, 3 Pin TO-39 (T10)

Features

- Replacement for the Motorola MWA 120
- Operating Temp. -55 °C to +125 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +125 °C
Frequency	100 kHz - 400 MHz	100 kHz - 400 MHz
Gain	15 dB	13 dB Min.
Power @ 1 dB Comp.	+9 dBm	+7 dBm Min.
Reverse Isolation	-18 dB	-17 dB Max.
VSWR In	2.0:1	2.5:1 Max.
Out	2.2:1	2.5:1 Max.
Noise Figure	5.0 dB	6.5 dB Max.
Power Vdc	+5	+5
mA	25	28 Max.

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

Revision 6/4/2012

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +31 dBm (Typ.)

Second Order Two Tone Intercept Point +25 dBm (Typ.)

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

Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature -55°C to +125 °C

Storage Temperature -62°C to +200 °C

Case Temperature +125 °C

Continuous RF Input Power +13 dBm

DC Voltage + 8 Volts

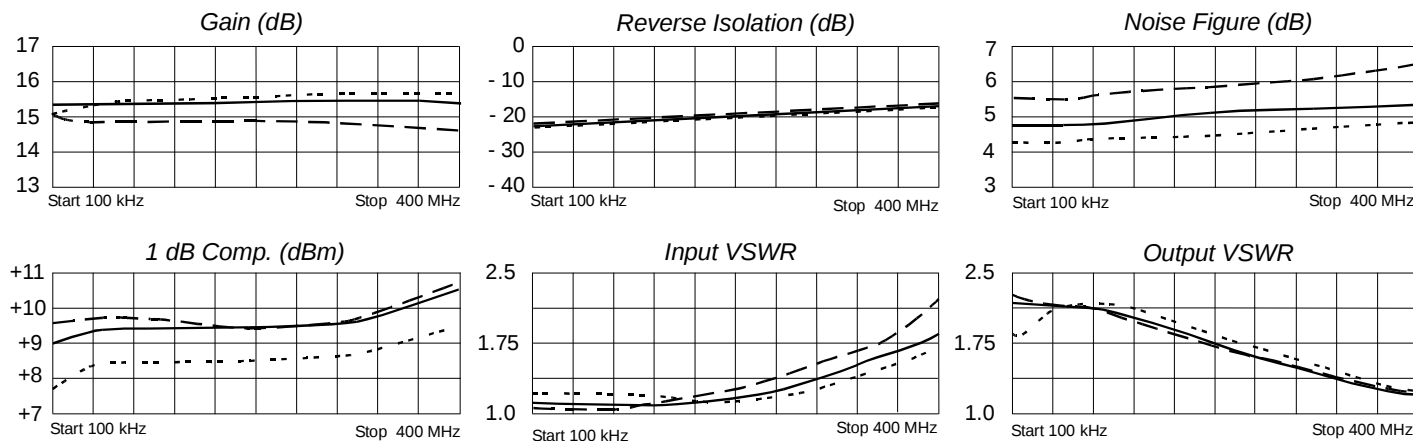
Short Term RF Input Power 50 Milliwatts (1 Minute Max.)

Maximum Peak Power 0.5 Watt (3 μsec Max.)

*Three external capacitors and a decoupling impedance are required.

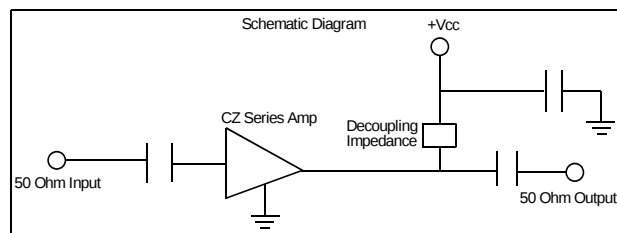
*Decoupling Impedance is 330 Ohms

Typical Performance Data



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

The CZ8120 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.



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