

RF AMPLIFIER

MODEL CZ8130

Available as CZ8130, 3 Pin TO-39 (T10)
SZ8130, 3 Pin TO-39 MIL-STD-883
Screened Version

Features

- Replacement for Motorola MWA130
- Lower Cost; Medium Gain: 14 dB Typical
- Medium Output Power: +18 dBm Typical
- Operating Temp. -55 °C to +125 °C

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +125 °C
Frequency	100 kHz - 400 MHz	100 kHz - 400 MHz
Gain	14 dB	13 dB Min.
Power @ 1 dB Comp.	18 dBm	15 dBm Min.
Reverse Isolation	-20 dB	-15.5 dB Max.
VSWR In	2.25:1	3.0:1 Max.
Out	2.00:1	2.5:1 Max.
Noise Figure	6.0 dB	7.0 dB Max.
Power Vdc	+5.75	+5.75
mA	60	65 Max.

Revision 6/2/2012

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +46 dBm (Typ.)
Second Order Two Tone Intercept Point +40 dBm (Typ.)
Third Order Two Tone Intercept Point +30 dBm (Typ.)

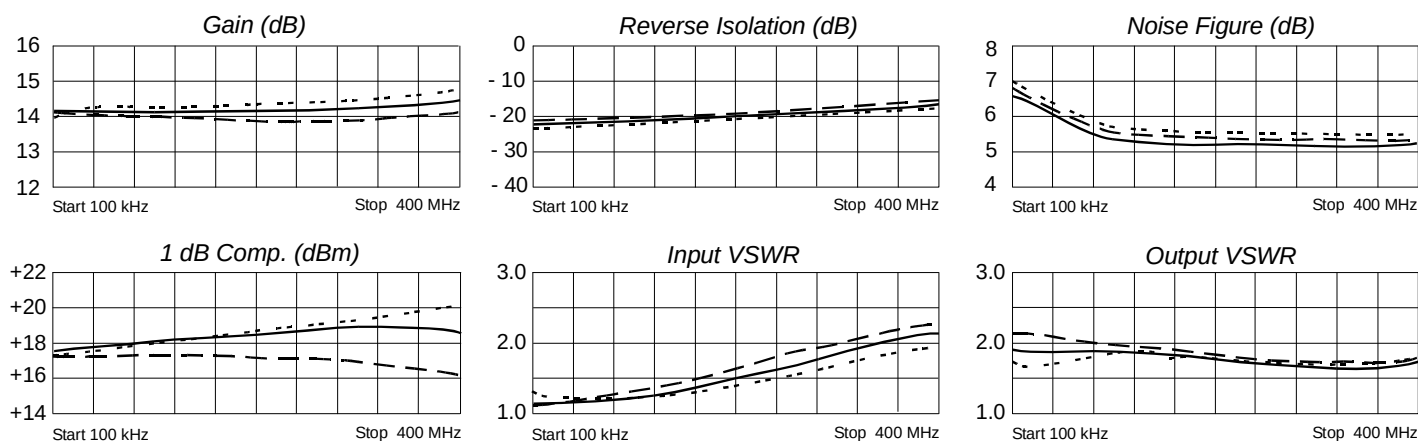
Absolute Maximum (No Damage) Ratings

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 +13 dBm
Short Term RF Input Power 100 Milliwatts (1 Minute Max.)
Maximum Peak Power 0.5 Watt (3 µsec Max.)

*Decoupling Impedance is 330 Ohms

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 CZ8130 Amplifier is 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.

