RF AMPLIFIER
MODEL *CZ8330*

Available as: CZ8330, 3 Pin TO-39 (T10)
TN8330, 4 Pin Surface Mount (SM3)
FP8330, 4 Pin Flatpack (FP4)
BX8330, Connectorized Housing (H1)

Features

- Lower Cost; Medium Gain: 6.2 dB Typical
- High Output Power: +14 dBm Typical
- Operating Temp. 0 ºC to +70 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = 0 ºC to +70 ºC
Frequency	kHz -1000 MHz	kHz - 1000 MHz
Gain (dB)	6.2	5.0 Min.
Power @ 1 dB Comp. (dBm)	+14	+10.0 Min.
Reverse Isolation (dB)	- 14	-12.0 Max.
VSWR In Out	< 2.5:1 < 2.5:1	3.0:1 Max. 3.0:1 Max.
Noise figure (dB)	< 9.5	11.0 Max.
Power Vdc mA	+ 4.5 60	+4.5 65 Max.

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

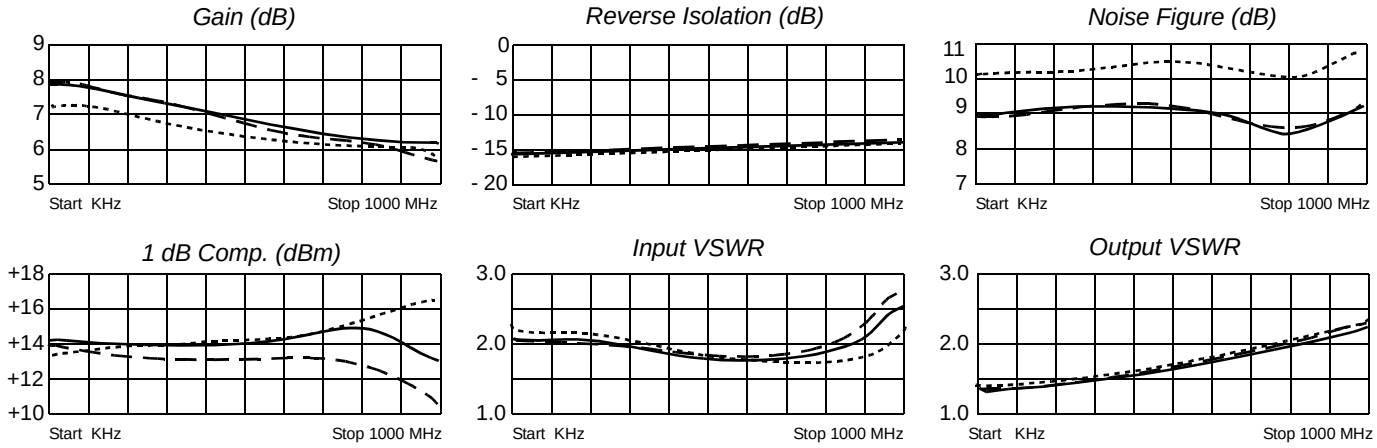
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+37 dBm (Typ.)
Second Order Two Tone Intercept Poin.....+31 dBm (Typ.)
Third Order Two Tone Intercept Point.....+25 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 125 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Current ..... 100 mA
Continuous RF Input Power ..... + 18 dBm
Short Term RF Input Power .... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

Typical Performance Data

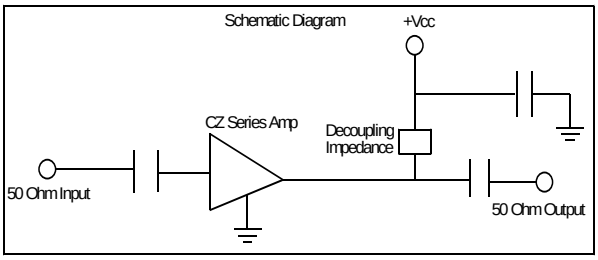


Legend ——— *+25 ºC* – – – *+70 ºC* - - - - - - *0 ºC*

* Decoupling Impedance is 1 KOhm

The CZ83X0 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 recponse of the Amplifier.

The CZ83X0 Series Amplifiers can be cascaded in series of two or more units without oscillation problems.



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