



GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

ZN121- ZN223 Series **VCXO** 4.0 MHz – 90.0 MHz

Hybrid VCXO
Wide Frequency Control Range
24 PIN DIP
ECL Output

SPECIFICATIONS

Frequency	4.0 MHz to 90.0 MHz
Output	Square Wave
Input Voltage	-5.2 Vdc $\pm$ 5%
Input Current	100 mA Max.
Operational Temperature	-30 to +70°C
Stability	$\pm$ 50 ppm
Frequency Control Range	$\pm$ 200 ppm Min.

Ext. Frequency Control Pin 11 Control Voltage: 0 ± 4 V (DC coupled with a max. modulation rate of 15 KHz) Center frequency will occur at 0 V $\pm$ 1 V control voltage

Output Voltage ≤ 10 ECL
50 Ohm Resistor to -2.0 V

Modulation Input Load 1K Ohm $\pm$ 200 Ohm
Linearity $<\pm 10\%$ or better Positive Slope

Model	Frequency Range	Ext. Freq. Control
ZN121	4 MHz to 14.99 MHz	
ZN122	15.0 MHz to 30.0 MHz	
ZN123	>30 MHz to 60 MHz	
ZN223	>60 MHz to 90 MHz	
ZN121Z	4 MHz to 14.99 MHz	X
ZN122Z	15.0 MHz to 30.0 MHz	X
ZN123Z	>30 MHz to 60 MHz	X
ZN223Z	>60 MHz to 90 MHz	X

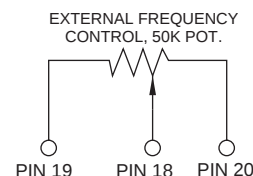
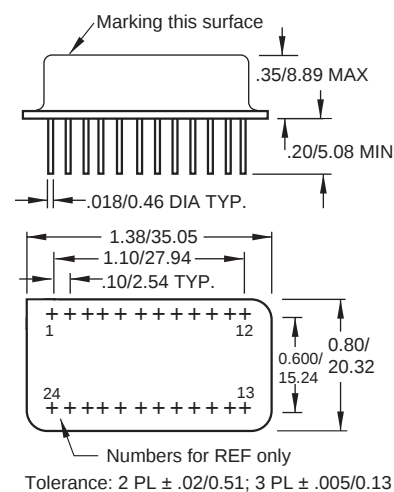
Ordering Example: ZN121 - 10.0 MHz
(Model# - Frequency)

PIN CONNECTIONS

- 1 – 0V, Case GND
- 9 – Output
- 11 – EFC
- 12 – Supply Voltage
- 13 – Supply Voltage
- 24 – 0V, Case GND

- 18
- 19 } "Z" Option
- 20

All others are N/C



Dimensions: Inches (mm)

To inquire about available custom parameters please contact us at sales@greenrayindustries.com.