



GREENRAY INDUSTRIES, INC.

ZN230 Series **VCXO**  
100.0 MHz – 200.0 MHz

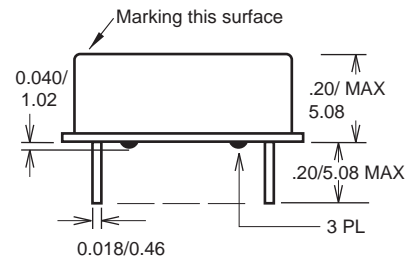
PRECISION QUARTZ TECHNOLOGY

High Frequency Fundamental Crystal  
Low Jitter  
LVPECL Output

**SPECIFICATIONS**

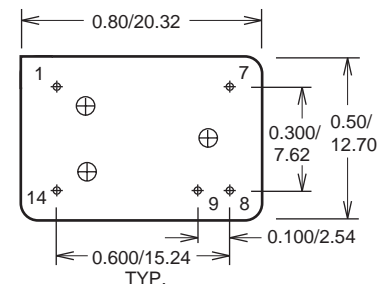
<b>Frequency</b>	100.0 MHz to 200.0 MHz	
<b>Output</b>	PECL	
<b>Input Voltage</b>	+3.3 Vdc $\pm$ 5%, (5.0 Vdc option available)	
<b>Initial Stability</b>	$\pm$ 10 ppm	
<b>Temperature Stability</b>	$\pm$ 30 ppm	
<b>Operational Temp. Range</b>	-40 to +85°C	
<b>Current Consumption</b>	< 65 mA	
<b>Rise and Fall</b>	< 1 ns	
<b>Duty Cycle</b>	40/60%	
<b>Frequency Control</b>	> $\pm$ 100 ppm 0 to 3.3V	
<b>Load</b>	50 ohms	
<b>Linearity</b>	< 10% positive slope	
<b>Jitter (12KHz to 20MHz)</b>	< 0.5 ps	
<b>Phase Noise</b>	<b>Offset Frequency (Hz)</b>	
(Typical @ 155.52 MHz)	10	-60
	100	-90
	1K	-120
	10K	-135
	100K	-140

Ordering Example: ZN230 - 100.0 MHz  
(Model# - Frequency)



- PIN CONNECTIONS**
- 1 – Frequency Control
  - 7 – 0V, Case GND
  - 8 – Output
  - 9 – Complementary Output
  - 14 – Input Voltage

Dimensions: Inches (mm)



Tolerance: 2 PL  $\pm$  .02/0.51; 3 PL  $\pm$  .005/0.13  
(Pin # for reference only)

To inquire about available custom parameters please contact us at [sales@greenrayindustries.com](mailto:sales@greenrayindustries.com).