



# ZYH1002 Series OCXO

10 to 50 MHz

(Rev D)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

Miniature Package  
Stratum 3 Compliant

## SPECIFICATIONS

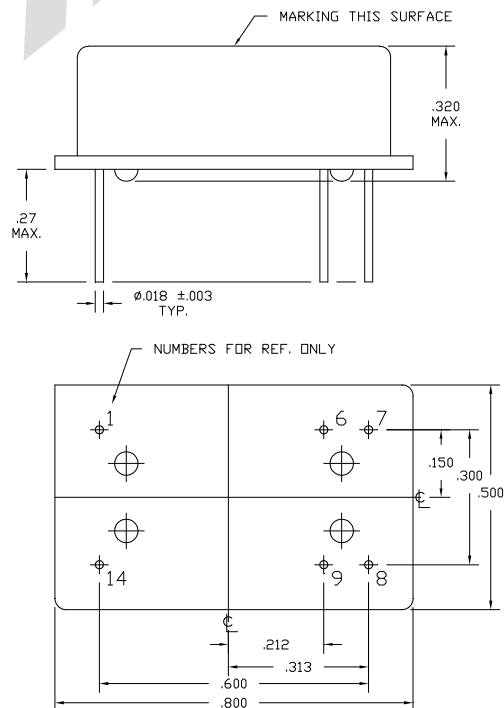
<b>Frequency Output</b>	10.0 to 50.0 MHz ZYH1002, CMOS - 15pF load ZYH1003, Clipped Sinewave (0.8V p-p min) - 10kohm/10pF load										
<b>Temp Stability</b>	<table border="0"> <tr> <td><b>Temp Range</b></td> <td><b>Tolerance</b></td> </tr> <tr> <td>-20 to +70°C</td> <td><math>\pm 1 \times 10^{-7}</math></td> </tr> <tr> <td>-40 to +70°C</td> <td><math>\pm 1 \times 10^{-7}</math></td> </tr> </table>	<b>Temp Range</b>	<b>Tolerance</b>	-20 to +70°C	$\pm 1 \times 10^{-7}$	-40 to +70°C	$\pm 1 \times 10^{-7}$				
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<b>Freq vs. Supply Short Term</b>	$\pm 1 \times 10^{-8}$ per % change										
<b>24 Hr Holdover</b>	$1 \times 10^{-10}$ max for 1 sec tau										
<b>Aging</b>	$\pm 0.03$ ppM max (+25 to +50°C)										
<b>Input Voltage</b>	$\pm 0.5$ ppM/year max										
<b>Input Power</b>	+5.0VDC $\pm 5\%$ Warmup - <350mW Idle - 125mW @ +25°C										
<b>Warm Up Time</b>	< 2 min to within $\pm 0.1$ ppM										
<b>Phase Noise (typical, 10MHz)</b>	<table border="0"> <tr> <td>10 Hz</td> <td>-95 dBc/Hz</td> </tr> <tr> <td>100 Hz</td> <td>-125 dBc/Hz</td> </tr> <tr> <td>1 kHz</td> <td>-145 dBc/Hz</td> </tr> <tr> <td>10 kHz</td> <td>-152 dBc/Hz</td> </tr> <tr> <td>100 kHz</td> <td>-155 dBc/Hz</td> </tr> </table>	10 Hz	-95 dBc/Hz	100 Hz	-125 dBc/Hz	1 kHz	-145 dBc/Hz	10 kHz	-152 dBc/Hz	100 kHz	-155 dBc/Hz
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<b>G-Sensitivity</b>	$\leq 1 \times 10^{-9}$ /g										
<b>Frequency Adjust</b>	$\pm 3.0$ ppM min, positive slope 0 to +5.0V EFC										

Ordering Example:

ZYH1002-10.0MHz  
(Model-Freq)

### Pad Connections

- 1 - EFC
- 6 - N/C
- 7 - 0V/Gnd
- 8 - Output
- 9 - N/C
- 14 - Supply V



Note - a SMT version is available.

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