



YH1310 Series OCXO

10 MHz – 30 MHz

(Rev C)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

Low Phase Noise
HCMOS or Sinewave Output
Ideal for Base Station or Test Equipment Apps

SPECIFICATIONS

Frequency Output	10.0 MHz to 30.0 MHz YH1310 - Sinewave, +5dBm min into 50 ohms YH1311 - Squarewave, HCMOS																				
Harmonics Symmetry	-20dBc (Sinewave) 50% ±10%																				
Temp Stability	<table border="0"> <thead> <tr> <th>Temp Range</th> <th>SC Tolerance</th> <th>Model</th> <th>AT Tolerance</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td>0 to +50°C</td> <td>± 2x10⁻⁸</td> <td>B28</td> <td>± 1x10⁻⁷</td> <td>B17</td> </tr> <tr> <td>-20 to +70°C</td> <td>± 3x10⁻⁸</td> <td>N38</td> <td>± 2x10⁻⁷</td> <td>N27</td> </tr> <tr> <td>-40 to +85°C</td> <td>± 5x10⁻⁸</td> <td>T58</td> <td>± 5x10⁻⁷</td> <td>T57</td> </tr> </tbody> </table>	Temp Range	SC Tolerance	Model	AT Tolerance	Model	0 to +50°C	± 2x10 ⁻⁸	B28	± 1x10 ⁻⁷	B17	-20 to +70°C	± 3x10 ⁻⁸	N38	± 2x10 ⁻⁷	N27	-40 to +85°C	± 5x10 ⁻⁸	T58	± 5x10 ⁻⁷	T57
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Freq vs. Supply Aging	±5x10 ⁻⁹ for a 5% change ±1x10 ⁻⁷ per year (10MHz SC)																				
Input Voltage	+5V or +12 VDC ± 5%																				
Input Power	Turn-on - ≤ 6W for 5 minutes Idle - ≤ 2W @ +25°C																				
Warm-up Time	within ± 5x10 ⁻⁸ in 5 minutes, ref to 60 minute frequency @ +25°C																				
Phase Noise (Sine Typ)	<table border="0"> <thead> <tr> <th></th> <th>10MHz SC</th> <th>10MHz AT</th> </tr> </thead> <tbody> <tr> <td>10 Hz</td> <td>-125 dBc/Hz</td> <td>-105 dBc/Hz</td> </tr> <tr> <td>100 Hz</td> <td>-140 dBc/Hz</td> <td>-135 dBc/Hz</td> </tr> <tr> <td>1 kHz</td> <td>-150 dBc/Hz</td> <td>-150 dBc/Hz</td> </tr> <tr> <td>10 kHz</td> <td>-155 dBc/Hz</td> <td>-155 dBc/Hz</td> </tr> <tr> <td>100 kHz</td> <td>-158 dBc/Hz</td> <td>-155 dBc/Hz</td> </tr> </tbody> </table>		10MHz SC	10MHz AT	10 Hz	-125 dBc/Hz	-105 dBc/Hz	100 Hz	-140 dBc/Hz	-135 dBc/Hz	1 kHz	-150 dBc/Hz	-150 dBc/Hz	10 kHz	-155 dBc/Hz	-155 dBc/Hz	100 kHz	-158 dBc/Hz	-155 dBc/Hz		
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Frequency Adjust	±1.0 ppm typ, positive slope +0.5 to +4.5V EFC																				

Ordering Example:

YH1310 - N38 - 5.0 - 10.0MHz
(Model# - Stability - Input V - Frequency)

