



# Y1600 Series XO

10MHz – 50MHz  
(Rev A)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

Rugged XO  
Low Phase Noise

## SPECIFICATIONS

<b>Frequency:</b>	10.0 MHz to 50.0 MHz		
<b>Output:</b>	HCMOS		
<b>Load:</b>	10 to 15 pF		
<b>Symmetry:</b>	50% ± 5%		
<b>Temp Stability:</b>	<b>Temp Range</b>	<b>Tolerance</b>	<b>Option</b>
	0 to +50°C	±5x10 <sup>-6</sup>	B56
	-20 to +70°C	±10x10 <sup>-6</sup>	N106
	-40 to +85°C	±15x10 <sup>-6</sup>	T156
<b>Initial Accuracy:</b>	within ±3 ppM of nominal @ +2.5V EFC		
<b>Aging:</b>	<±1 ppM – 1 <sup>st</sup> year; <3 ppM for 10 yrs (10 MHz)		
<b>Input Voltage:</b>	+5.0 VDC ± 5%		
<b>Input Current:</b>	<15 mA (10 MHz)		
<b>Phase Noise:</b>	10 Hz	-105 dBc/Hz	
(typ @ 10 MHz)	100 Hz	-135 dBc/Hz	
	1 kHz	-155 dBc/Hz	
	10 kHz	-160 dBc/Hz	
	100 kHz	-162 dBc/Hz	
<b>Frequency Adjust:</b>	±10 ppM typ, positive slope 0.5V to +4.5V EFC		

### Environmental:

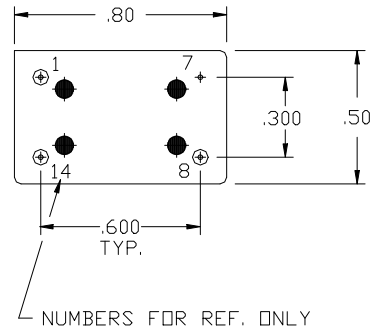
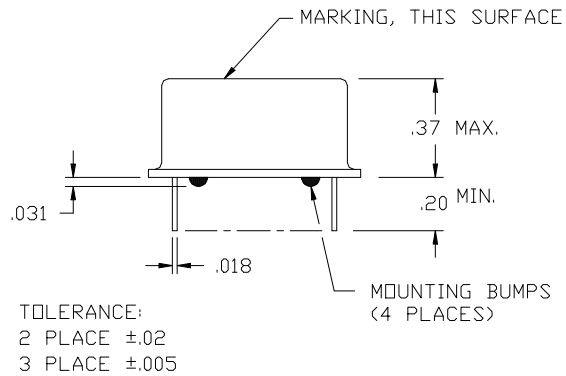
1. Random Vibration – per MIL-STD-202, Meth 214, Cond. IA
2. Shock – per MIL-STD-202, Meth 213, Cond. C
3. Storage Temp - -55° to +85°C

### Ordering Example:

Y1600-N106-10.0 MHz  
(Model-Stability-Frequency)

### Pin Connections:

- 1 - EFC
- 7 - 0V/Case Gnd
- 8 - Output
- 14 - Supply V



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

840 West Church Rd., Mechanicsburg, PA 17055

Tel: 717-766-0223 Fax: 717-790-9509

[www.greenrayindustries.com](http://www.greenrayindustries.com) email: [sales@greenrayindustries.com](mailto:sales@greenrayindustries.com)