



ZT610 series TCXO

10.0 to 50.0 MHz
(Rev B)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

Rugged TCXO
Low Phase Noise

SPECIFICATIONS

Frequency:	10.0 to 50.0MHz		
Output:	CMOS squarewave; capable of sink/source of up to 15mA		
Load:	10 to 15 pF		
Symmetry:	50% ± 10%		
Rise/Fall Time	<3ns		
Temp Stability:	Temp Range	Tolerance	Option
(100% test)	0 to +50°C	±5x10 ⁻⁷	B57
	-20 to +70°C	±1x10 ⁻⁶	N16
	-20 to +70°C	±2x10 ⁻⁶	N26
	-40 to +85°C	±1x10 ⁻⁶	T16
	-40 to +85°C	±3x10 ⁻⁶	T36

(Note: Not all stabilities are available at all frequencies)

Aging:	<1 ppM/year; <±5.0ppM for 10 years		
Input Voltage:	+5.0 VDC ± 5%		
Freq vs. Input V	<1ppM for a 5% change		
Input Current:	<15 mA + output sink/source current (15pF load)		
Phase Noise:	Offset	dBc/Hz (10MHz)	dBc/Hz (50MHz)
(typical B57)	10 Hz	-105	-90 dBc/Hz
	100 Hz	-135	-120
	1 kHz	-155	-140
	10 kHz	-160	-150
	100 kHz	-163	-155

(Note: Phase noise can vary depending on required stability. Phase noise will be sample tested only.)

Frequency Adjust: ±5 ppM typ, positive slope; settable to nominal for 10 years

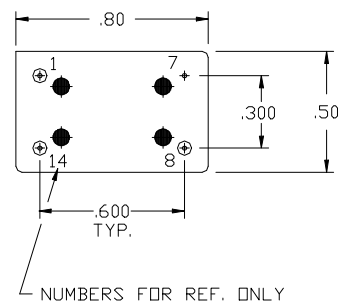
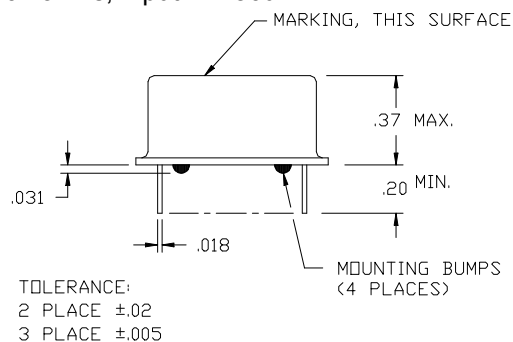
EFC Characteristics +0.5V to +4.5V EFC; Input Z - 100k ohms; Input I - <50uA

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
4. Unit can be reflowed, recommend peak temp of 220°C for 10 sec max.

Pin Connections:

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



840 West Church Rd., Mechanicsburg, PA 17055

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

www.greenrayindustries.com email: sales@greenrayindustries.com