# T1300 Series TCXO

**10 to 50MHz**

(Rev G)

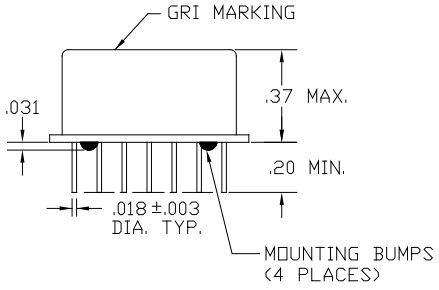
**GREENRAY INDUSTRIES, INC.**

***PRECISION QUARTZ TECHNOLOGY***

Ultra-Low Acceleration Sensitivity
Low Phase Noise

## SPECIFICATIONS

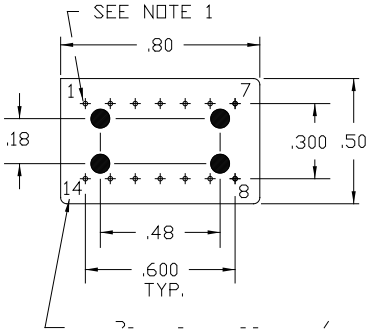
| | | |
|---|---|---|
| **Frequency** | 10.0 to 50MHz | |
| **Output** | CMOS Squarewave | |
| **Symmetry** | 50% ± 10% | |
| **Load** | 15pF/10kohm | |
| **Temp Stability** | **Temp Range** | **Tolerance** |
| | -40 to +85°C | ±2x10$^{-6}$ |
| **Freq vs. Supply** | ±1x10$^{-7}$ for a 5% change | |
| **Freq vs. Load** | ±1x10$^{-7}$ for a 10% change | |
| **Short Term** | 8x10$^{-11}$ typ for 1 sec tau (10MHz) | |
| **Aging** | ±0.5ppM/year after 14 days operation | |
| **Input Voltage** | +5.0VDC or +3.3VDC ± 5% | |
| **Input Current** | 20mA max | |
| **Warm Up Time** | to within ±1ppM in 10msec | |
| **Phase Noise** | 10 Hz | -100 dBc/Hz |
| (typical, 10MHz, +5V) | 100 Hz | -130 dBc/Hz |
| | 1 kHz | -155 dBc/Hz |
| | 10 kHz | -162 dBc/Hz |
| | 100 kHz | -162 dBc/Hz |
| **G-Sensitivity** | **≤7x10$^{-11}$/g** in the worst axis | |
| **Frequency Adjust** | ±6.0 ppM typ, positive slope | |
| | 0 to Vcc EFC, 50k ohm input Z | |




Ordering Example:

T1300-5.0-10.0MHz
(Model-Inp V-Freq)

**Pin Connections**
1 - EFC
7 - 0V/Gnd
8 - Output
12 - EFC Filter Enable*
14 - Supply V
Remaining pins are not connected.




- EFC input is through a low pass filter for phase noise reduction. The filter may be disabled for faster response by grounding Pin 12. The filter is enabled if the pin is floating or at logic “1” (+5V).