



T1220 Series TCXO

10MHz – 50MHz
(Rev F)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

Dual Compensation
Tight Stability

SPECIFICATIONS

| | | | |
|--------------------------|------------------------------------------------------------------------------|---------------------|---------------|
| Frequency | 10.0 MHz to 50.0 MHz | | |
| Output | T1220 – CMOS Squarewave; T1221 - Clipped Sinewave | | |
| Load | T1220 - 15pF; T1221 – 10pf / 10kohms | | |
| Symmetry | 50% ± 10% (squarewave version) | | |
| Temp Stability | Temp Range | Tolerance | Option |
| | -40 to +85°C | ±3x10 ⁻⁸ | T38 |
| | -40 to +85°C | ±5x10 ⁻⁸ | T58 |
| | (fmax-fmin)/2xfmin; EFC at center of range | | |
| | Trim effect ≤ ±0.1ppM over 0 to Vs EFC and temp. | | |
| | Hysteresis not included. | | |
| Freq vs. Supply | ±1x10 ⁻⁷ for a 5% change | | |
| Aging | ±5x10 ⁻⁷ per year | | |
| Supply V | +5.0 or +3.3 VDC ± 5% | | |
| Input Current | 25mA max | | |
| Phase Noise | Offset | dBc/Hz | |
| (10MHz CMOS typ) | 10 Hz | -90 | |
| | 100 Hz | -120 | |
| | 1 kHz | -140 | |
| | 10 kHz | -150 | |
| | 100 kHz | -155 | |
| Accel Sensitivity | ≤2.5x10 ⁻⁹ /g (SD option); or ≤7x10 ⁻¹⁰ /g (LG option) | | |
| Frequency Adjust | ±7ppM typ; via 0 to Vsupply EFC; positive slope | | |
| Environmental | | | |

Storage Temp: -55 to +95°C
 Random Vibration: MIL-STD-202, Meth 214, Cond I-J
 Sine Vibration: MIL-STD-202, Meth 204, Cond D
 Shock: MIL-STD-202, Meth 213, Cond F

Ordering Example:

T1220-T58-3.3-10MHz
 (Model-Stab-InpV-Freq)

Pin Configuration

Pin 1 EFC
 Pin 7 0V / Case Gnd
 Pin 8 Output
 Pin 14 Input V

