



# T75 Series TCXO

10 MHz to 50 MHz

(Rev. J)

GREENRAY INDUSTRIES, INC.

## PRECISION QUARTZ TECHNOLOGY

Very Rugged TCXO  
Tight Temp Stability

### SPECIFICATIONS

|                               |  |                  |               |
|-------------------------------|--|------------------|---------------|
| <b>Frequency</b>              | 10.0 MHz to 50.0MHz  |                  |               |
| <b>Output</b>                 | CMOS or Clipped Sinewave   |                  |               |
| <b>Symmetry</b>               | 50% ± 10% (CMOS)   |                  |               |
| <b>Output Level</b>           | Clipped SINE - +0.8V p-p typ into 10pF/10k ohm load;<br>HCMOS – T75 - +0.2V max to +2.8V min; T76 - +0.2V max to +4.2V min (15pF load) |                  |               |
| <b>Temp Stability</b>         | <b>Temp Range</b>  | <b>Tolerance</b> | <b>Option</b> |
| (other stabilities available) | -10°C to +60°C   | ±0.3 ppM         | G37           |
|                               | -20°C to +70°C   | ±0.5 ppM         | N57           |
|                               | -40°C to +85°C   | ±0.5 ppM         | T57           |
|                               | -40°C to +85°C   | ±1.0 ppM         | T16           |
|                               | -55°C to +95°C   | ±3.0 ppM         | V36           |
| <b>Aging</b>                  | <1 ppM/yr (10 MHz typ)   |                  |               |
| <b>Freq Adjust</b>            | ±7 ppM typ via 0 to V <sub>cc</sub> control V, positive slope  |                  |               |
| <b>Supply Voltage</b>         | +3.3 VDC ± 5% or +5.0 VDC  |                  |               |
| <b>Supply Current</b>         | < 6mA for HCMOS; < 3mA for SINE  |                  |               |
| <b>Accel Sensitivity</b>      | ≤2.5x10 <sup>-9</sup> /g (“SD” option); ≤7x10 <sup>-10</sup> /g (“LG” option)  |                  |               |
| <b>Environmentals</b>         |  |                  |               |

Vibration – per MIL-STD-202G, Meth 214, Cond I-F

Shock - per MIL-STD-202G, Meth 213, Cond F

(Shock level available up to 50000g!)

#### Ordering Information:

|       |         |          |
|-------|---------|----------|
| Model | Input V | Output   |
| T75   | +3.3V   | HCMOS    |
| T76   | +5.0V   | HCMOS    |
| T77   | +3.3V   | SINEWAVE |
| T78   | +5.0V   | SINEWAVE |

#### Ordering Example:

T75-T57-LG-20.0MHz  
(Model-Stability-GSense-Freq)

#### Pad Connections

- 1 - EFC
- 2 - Internal Use Only
- 3 - 0 V & Case Gnd
- 4 - Output
- 5 - Tri-State (enable Hi or float)
- 6 - VSupply
- A - Internal Use Only
- B - Internal Use Only

