

- Very rugged TCXO
- Low Phase Noise



**DESCRIPTION**

T96 series TCXOs are high stability TCXOs designed for applications requiring a very rugged components. The part exhibits low phase noise.

**SPECIFICATIONS**

|                        |  |
|------------------------|--|
| Frequency Range:       | 10.0MHz to 100.0MHz  |
| Output:                | HCMOS  |
| Supply Voltage         |  |
| T96:                   | +3.3VDC ±5%  |
| T97:                   | +5.0VDC ±5%  |
| Supply Current:        | <50mA  |
| Symmetry:              | 50%±10%  |
| Load:                  | 10pF to 20pF   |
| Output Level           |  |
| LOW:                   | 0 to +0.1V max.  |
| HIGH:                  | +2.8v min. (T96), +4.2V min. (T97)   |
| Temperature Stability: | See table  |
| Reflow Shift:          | <2.0ppm  |
| Ageing:                | <1 ppm/year  |
| Frequency Adjust:      | ±5ppm typical via 0 to Vcc control voltage, positive slope                 |
| Input Impedance:       | 50kΩ min.  |
| Phase Noise:           | See table  |
| Environmental:         | This part may be screened to MIL-PRF-55310, Class B, except for seal test. |

*Designed and manufactured by Greenray Industries Inc.*

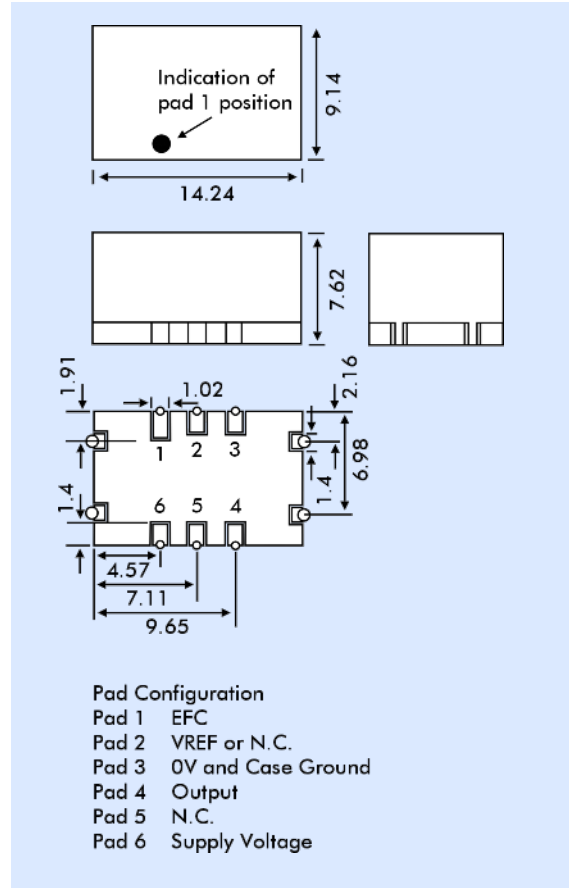
**STABILITY OVER TEMPERATURE**

| Temp. Range | Stability | Part No. Code |
|-------------|-----------|---------------|
| 0~+70°C     | ±0.3 ppm  | K37           |
| -20~+70°C   | ±0.5 ppm  | N57           |
| -40~+85°C   | ±0.5 ppm  | T57           |
| -40~+85°C   | ±1.0 ppm  | T16           |
| -55~+95°C   | ±1.0 ppm  | V16           |

**PHASE NOISE (Typical)**

| Offset | dBc/Hz at 10MHz | dBc/Hz at 100MHz |
|--------|-----------------|------------------|
| 10Hz   | -90             | -70              |
| 100Hz  | -115            | -95              |
| 1kHz   | -135            | -115             |
| 10kHz  | -150            | -125             |
| 100kHz | -155            | -125             |

**T96 - OUTLINES AND DIMENSIONS**



**PART NUMBERING**

Example: **T96-K37-10.0MHz**

