

- Rugged construction for severe environments
- Excellent Temperature Stability ± 0.1 ppm over -20 to $+70^{\circ}\text{C}$
- HCMOS output (clipped sinewave option)
- SMD package



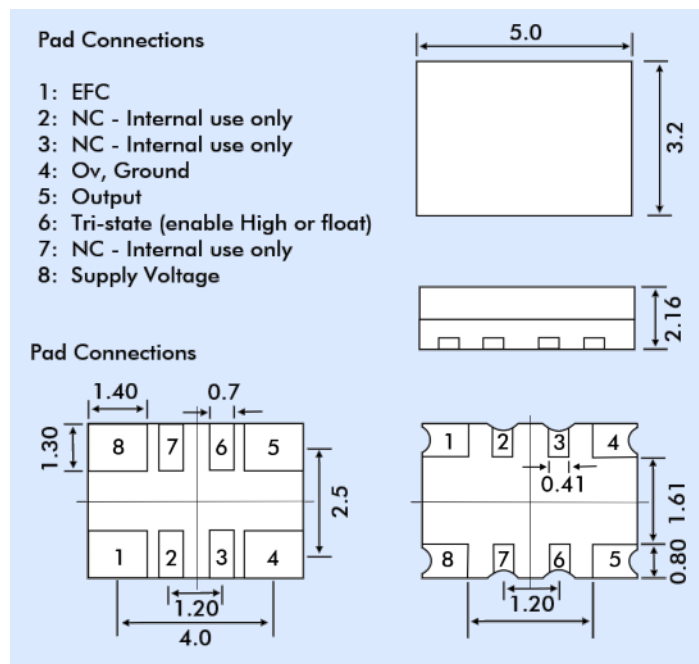
DESCRIPTION

T52 series TCXOs are designed for rugged, severe environmental applications. The part provides tight stability from 0.1ppm over -20° to $+70^{\circ}\text{C}$.

GENERAL SPECIFICATION

Frequency Range:	10.0MHz to 52.0MHz
Output	
HCMOS:	3.3V, +0.2V max to +2.8V min. 5.0V, +0.2V max to +4.2V min Load = 15pF
Clipped Sinewave:	+0.8V p-p min. into 10pF//10k Ω
Symmetry:	50% \pm 10% (HCMOS)
Temperature Stability:	see table
Supply Voltage:	+3.0VDC \pm 5%, +3.3VDC or 5.0VDC
Supply Current:	
HCMOS:	<6mA
Clipped Sinewave:	<3mA
G Sensitivity:	$\leq 2 \times 10^{-9}$ /g typ. (Standard 'SD') $\leq 7 \times 10^{-10}$ /g (Low G-Sense 'LG')
Ageing:	<1ppm/year typical
Frequency vs. Reflow:	<1ppm after 24 hour recovery
Frequency Adjust:	± 8 ppm typical via 0 to V _{CC} control V, positive slope; or available no adjust.
Environmentals	
Vibration:	MIL-STD-202G, Meth 214, Cond I-F
Shock:	MIL-STD-202G, Meth 213, Cond D

T52 - OUTLINES AND DIMENSIONS



STABILITY OVER TEMPERATURE

Temp. Range	Stability	Option Code
$-20^{\circ}\sim+70^{\circ}\text{C}$	± 0.1 ppm	N17
$-40^{\circ}\sim+85^{\circ}\text{C}$	± 0.2 ppm	T27
$-40^{\circ}\sim+85^{\circ}\text{C}$	± 0.5 ppm	T57
$-40^{\circ}\sim+85^{\circ}\text{C}$	± 1.0 ppm	T16

PART NUMBERING PROCEDURE

Example:

T52-N17-C-3.3-LG-20.0MHz

(Model number - Stability - Output - Supply V - G Sense - Frequency)