



Very Rugged TCXO, Highly Stable

10.0MHz to 50.0MHz

- **Rugged construction for severe environments**
- Excellent Temperature Stability ±0.1ppm over -20 to +70°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°C.

GENERAL SPECIFICATION

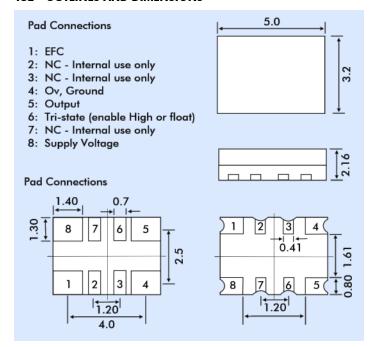
Frequency Range:	10.0MHz to 52.0MHz	
Output		
HCMOS:	3.3V, +0.2V max to +2.8V min.	
	5.0V, +0.2V max to +4.2V min	
	Load = 15pF	
Clipped Sinewave:	+0.8V p-p min. into 10pF//10kΩ	
Symmetry:	50%±10% (HCMOS)	
Temperature Stability:	see table	
Supply Voltage:	+3.0VDC±5%, +3.3VDC or 5.0VDC	
Supply Current:		
HCMOS:	<6mA	
Clipped Sinewave:	<3mA	
	101101	
G Sensitivity:	≤2x10-9/g typ. (Standard 'SD')	
	≤2x10-9/g typ. (Standard 'SD')	
G Sensitivity:	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG')	
G Sensitivity: Ageing:	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG') <1ppm/year typical	
G Sensitivity: Ageing: Frequency vs. Reflow:	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG') <1ppm/year typical <1ppm after 24 hour recovery	
G Sensitivity: Ageing: Frequency vs. Reflow:	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG') <1ppm/year typical <1ppm after 24 hour recovery ±8ppm typical via 0 to Vcc control V,	
G Sensitivity: Ageing: Frequency vs. Reflow: Frequency Adjust:	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG') <1ppm/year typical <1ppm after 24 hour recovery ±8ppm typical via 0 to Vcc control V,	
G Sensitivity: Ageing: Frequency vs. Reflow: Frequency Adjust: Environmentals	≤2x10-9/g typ. (Standard 'SD') ≤7x10-10/g (Low G-Sense 'LG') <1ppm/year typical <1ppm after 24 hour recovery ±8ppm typical via 0 to Vcc control V, positive slope; or available no adjust.	

Designed and manufactured by Greenray Industries Inc.

STABILITY OVER TEMPERATURE

Temp. Range	Stability	Option Code
-20°~+70°C	±0.1ppm	N17
-40°~+85°C	±0.2ppm	T27
-40°~+85°C	±0.5ppm	T57
-40°∼+85°C	±1.0ppm	T16

T52 - OUTLINES AND DIMENSIONS



PART NUMBERING PROCEDURE

Example:

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

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