

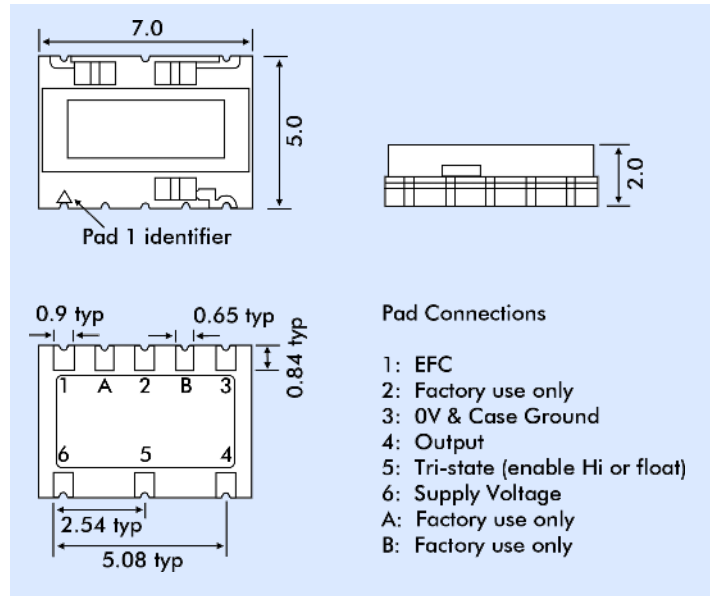
**Very rugged TCXO**

**10.0MHz to 50.0MHz**

- **TCXO constructed for Very rugged applications**
- **Miniature SMD format package**
- **Tight tolerances over temperature from 0.1ppm**
- **Wide frequency range, 10MHz to 50MHz**
- **Output CLIPPED SINEWAVE**



**T72 - OUTLINES AND DIMENSIONS**



**DESCRIPTION**

T70 series TCXOs are packaged in a miniature SMD format. The parts have a rugged construction and are able to withstand up to 50,000g. The part is available over a wide frequency range with close tolerances over temperature. Designed and manufactured by Greenray Industries Inc.

**GENERAL SPECIFICATION**

Frequency Range:	10.0MHz to 50.0MHz
Output:	HCMOS or Clipped Sinewave
Symmetry:	50%±10% (HCMOS)
Output Level	
SINE:	0.8V p-p into 10pF/100kΩ load
HCMOS:	T70 - +0.2V max. to +2.8V min; T71 - +0.2V max. to +4.2V min (15pf load)
Temperature Stability:	See table
Ageing:	<0.5ppm/yr at 10MHz (typical)
Frequency adjust:	±7ppm typical via 0 to Vcc control voltage, positive slope.
G-Sensitivity	
Standard (SD):	≤2.5x10 <sup>-9</sup> /g typical
Low G-Sensitivity version: (LG)	≤7x10 <sup>-10</sup> /g typical
Supply Voltage:	+3.3VDC ±5% or +5.0VDC ±5%
Supply Current:	<3mA for SINE, <6mA for HCMOS

**ENVIRONMENTAL**

Vibration: per MIL-STD-202G, Meth. 214, Cond. I-F  
 Shock: per MIL-STD-202G, Meth. 213, Cond. F  
 (Shock levels to 50,000g are available)

**FREQUENCY STABILITY OVER TEMPERATURE**

Temperature Stability (°C)	Tolerance	Option
-10 ~ +60	±0.1ppm	G17
-20 ~ +70	±0.1ppm	N17
-40 ~ +85	±0.2ppm	T27
-40 ~ +85	±0.3ppm	T37
-55 ~ +95	±1.0ppm	V16

(Other temperature stabilities are available)

**SPECIFYING INFORMATION**

Model No:	Input Voltage	Output Type
T70	+3.3V	HCMOS
T71	+5.0V	HCMOS
T72	+3.3V	Clipped Sine Wave
T73	+5.0V	Clipped Sine Wave

**T70 SERIES - PART NUMBERING PROCEDURE**

Example: **T72-T27-20.0MHz**

