



GREENRAY INDUSTRIES, INC.

T90/91 Series TCXO

10MHz -50MHz

Rev. K

PRECISION QUARTZ TECHNOLOGY

Very Rugged TCXO
Miniature SMT
Tight Temp Stability

SPECIFICATIONS

Frequency	10.0 MHz to 50.0 MHz		
Output	CMOS Squarewave		
Symmetry	50% $\pm$ 10%		
Output Level	T90 - +0.2V max to +4.1V min; T91 - +0.2V max to +2.4V min		
Temp Stability	Temp Range	Tolerance	Option
(other stabilities available)	-20°C to +70°C	$\pm$ 0.3 ppM	N37
	-20°C to +70°C	$\pm$ 0.5 ppM	N57
	-40°C to +85°C	$\pm$ 1.0 ppM	T16
	-40°C to +85°C	$\pm$ 0.5 ppM	T57
	-55°C to +95°C	$\pm$ 2.0 ppM	V26
Aging	<1 ppM/yr		
Freq Adjust	$\pm$ 5 ppM typ via 0 to +5V or 0 to +3.3V control V, positive slope		
Supply Voltage	+5.0 VDC $\pm$ 5% or +3.3 VDC		
Supply Current	< 20mA for CMOS; < 6mA for Clipped sine		
Environmentals			

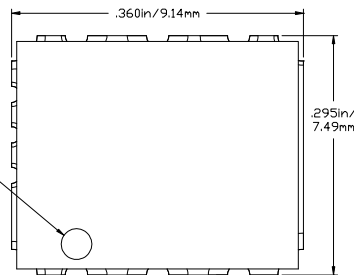
Vibration – per MIL-STD-202F, Meth 204, Cond A

Shock – per MIL-STD-202F, Meth 213, Cond C

Ordering Information:

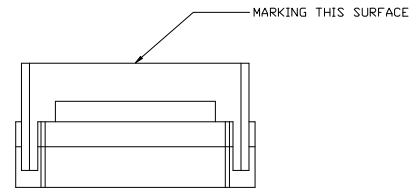
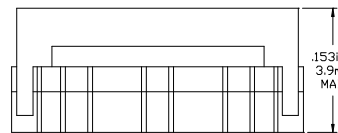
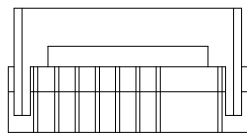
Model	Input Voltage	Output
T90	+5.0V	HCMOS
T91	+3.3V	HCMOS

PIN 1 IDENTIFIER ON LABEL



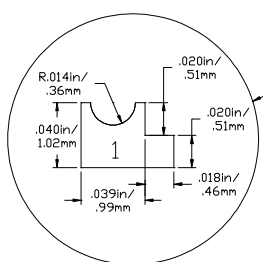
Ordering Example:

T90-N57-20.0MHz
(model-stability-freq)

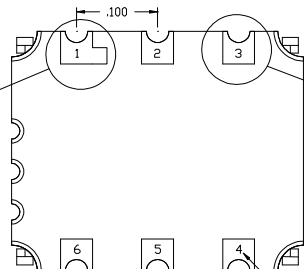


Pad Connections

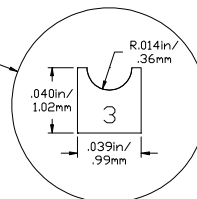
- 1 - EFC
- 2 - VRef
- 3 - 0 V & Case Gnd
- 4 - Output
- 5 - N/C
- 6 - VSupply



DETAIL OF CASTELLATION PAD 1



DETAIL OF CASTELLATION PAD 2-6



TOLERANCE
3 PLACES: .015

NUMBERS FOR REFERENCE ONLY

SHENZHEN YIJIN ELECTRONICS CO: LTD TEL: 0755-27876565

18924600166 QQ: 857950243 <http://www.vc-tcxo.com>