



T53 Series TCXO

10 MHz to 50 MHz

(Rev. D)

GREENRAY INDUSTRIES, INC.

PRECISION QUARTZ TECHNOLOGY

SPECIFICATIONS

Very Rugged TCXO
Tight Temp Stability

Frequency	10.0 MHz to 50.0 MHz		
Output	CMOS (C option) or Clipped Sinewave (S option)		
Symmetry	50% $\pm$ 10% (CMOS)		
Output Level	SINE - +0.8V p-p typ into 10pF/100k ohm load; CMOS - 3.3V - +0.2V max to +2.8V min; 5.0V - +0.2V max to +4.2V min; 15pF load		
Temp Stability (other stabilities available)	Temp Range	Tolerance	Option
	-10°C to +60°C	$\pm$ 0.3 ppM	G37
	-20°C to +70°C	$\pm$ 0.5 ppM	N57
	-40°C to +85°C	$\pm$ 0.5 ppM	T57
	-40°C to +85°C	$\pm$ 1.0 ppM	T16
	-55°C to +95°C	$\pm$ 2.0 ppM	V26
Aging	<1 ppM/yr - for standard shock level configuration (improved aging available)		
Freq Adjust	$\pm$ 8 ppM typ via 0 to V_{cc} control V, positive slope		
Supply Voltage	+3.0 VDC $\pm$ 5%, +3.3VDC, or +5.0 VDC		
Supply Current	< 6mA for HCMOS; < 3mA for SINE		
G-Sensitivity	Standard (SD) $\leq 2.5 \times 10^{-9}$ /g typ; Low G-sensitivity option (LG) $\leq 7 \times 10^{-10}$ /g		
Environmentals			
	Vibration – per MIL-STD-202G, Meth 214, Cond I-F		
	Shock - per MIL-STD-202G, Meth 213, Cond D		

Note: Shock levels are available up to 50000g, the standard part (A) shock and vibration is specified as above. For higher levels please specify the (B) option and consult the factory with your needs.

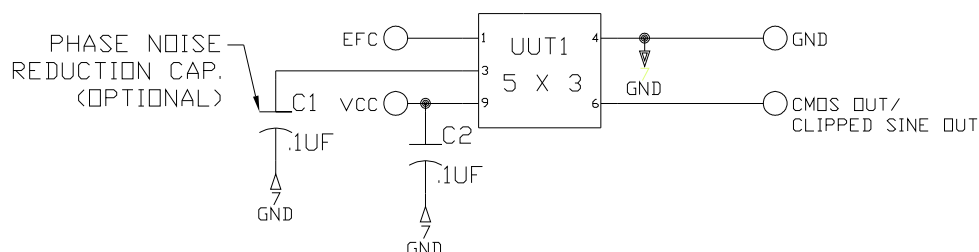
Ordering Example:

T53-T57-C-3.3-LG-A-20.0MHz
(Model-Stability-Output-SupplyV-GSense-Shock-Freq)

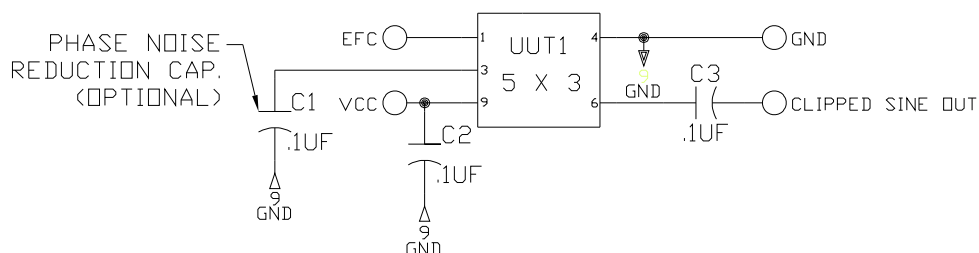
Outline Note: An optional pad layout would be to only use the four corner pads - 1, 4, 6, & 9. This pad layout can be used if the Tristate, Vref, and Low Phase Noise options are not needed.

Recommended Output Configuration

CMOS/
CLIPPED SINE <DC COUPLED>



CLIPPED SINE <AC COUPLED>



Outline Drawing

Pad Connections

- 1 - EFC
- 2 - Vref
- 3 - N/C or Low Phase Noise Cap option
- 4 - 0V, Ground
- 5 - Tri-State (enable Hi or float)
- 6 - output
- 7 - N/C, Internal Use Only
- 8 - N/C, Internal Use Only
- 9 - Supply Voltage
- 10 - N/C, Internal Use Only

Pad Layout

