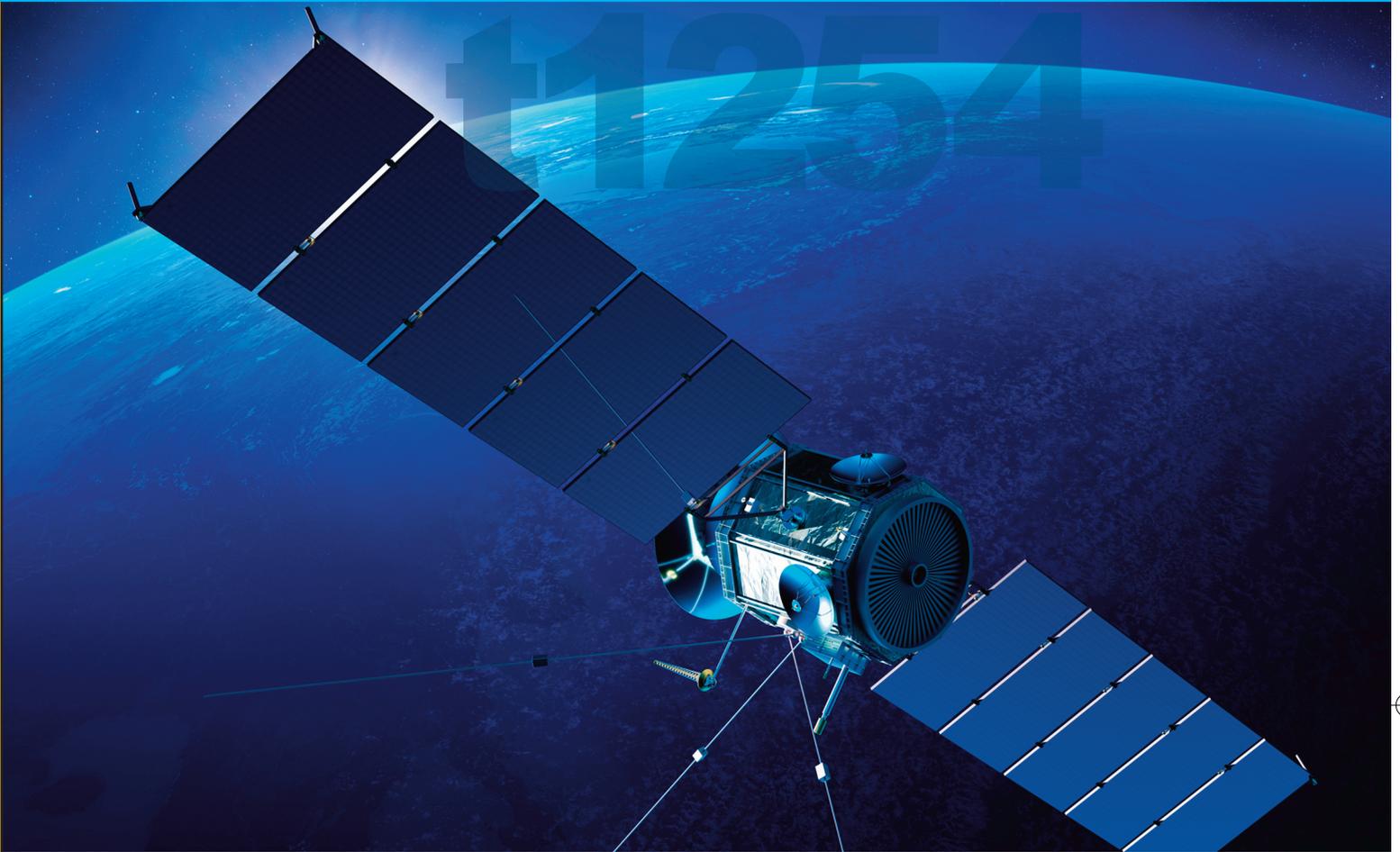


# Introducing the Radiation Hardened T1254 TCXO for Low Orbit Satellite Apps.



www.greenrayindustries.com

Greenray Industries' new T1254 Series TCXO has been designed for use as a reference for low orbit satellite applications that require guaranteed performance under radiation exposure to 30krad.

The T1254 TCXO, available from 10 to 100 MHz, features a rugged, 20.3 x 12.7 mm DIP package, CMOS output and supply voltage of +5.0 VDC. Reduced acceleration sensitivity is  $<7 \times 10^{-10}/g$  (standard) or  $<7 \times 10^{-11}/g$  (LG option).

For more information about our full line of high performance oscillators, call Greenray at 717-766-0223. You can also visit us at [www.greenrayindustries.com](http://www.greenrayindustries.com).

**T1254**



<b>Frequency</b>	10 - 100 MHz
<b>Output</b>	CMOS
<b>Size</b>	20.3 x 12.7mm DIP pkg.



For Industry, for Defense.



## T1254 Series TCXO

10 to 100 MHz  
(Rev B)

GREENRAY INDUSTRIES, INC.

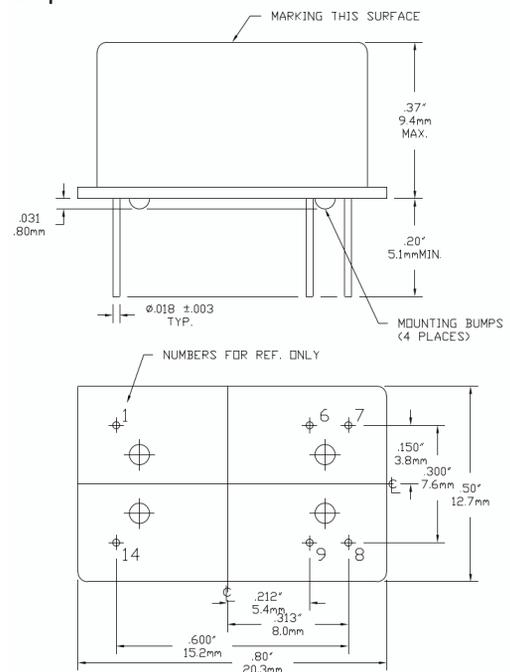
PRECISION QUARTZ TECHNOLOGY

Very Rugged TCXO  
Radiation Tolerant

<b>Frequency</b>	10.0 to 100.0 MHz		
<b>Output</b>	CMOS		
<b>Symmetry</b>	50% ±10%		
<b>Output Level</b>	5+0.2V max to +4.5 min (15pF load)		
<b>Temp Stability</b>	<b>Temp Range</b>	<b>Tolerance</b>	<b>Options</b>
	-20 to +70°C	± 1.0 ppM	N16
	-40 to +85°C	± 3.0 ppM	T36
	-55 to +85°C	± 5.0 ppM	V56
<b>Short Term Aging</b>	±1x10 <sup>-9</sup> for a 1 sec tau		
<b>Frequency Adjust</b>	+7 ppM/yr		
<b>Supply Voltage</b>	+5.0 VDC ± 5% (+3.0 VDC optional)		
<b>Freq. vs Voltage</b>	±3 x 10 <sup>-7</sup> max for a 2% change		
<b>Supply Current</b>	<35 mA		
<b>Acceleration Sensitivity</b>	≤7 x 10 <sup>-10</sup> /g (SD) or ≤7 x 10 <sup>-11</sup> /g (LG)		
<b>Phase Noise</b>	<b>Offset</b>	<b>dBc/Hz</b>	
(Typ. @ 10 MHz)	10 Hz	-90	
	100 Hz	-120	
	1 kHz	-145	
	10 kHz	-150	
	100 kHz	-155	

### Environmentals

Vibration – per MIL-STD-833, Method 2007, Cond. A  
Shock – per MIL-STD-833, Method 2002, Cond. B  
Operating Temp – -40°C to +105°C  
Storage Temp – -65°C to +125°C  
Radiation – Reliable operation during exposure to 30 krad  
Terminal Finish – Sn63/Pb37 solder dipped  
Package Finish – stainless steel & nickel-plated Kovar  
Package Weight – approx. 3 grams



**Ordering Example** T1254-T36-LG-10.0MHz (Model-InpV-GSens-Freq)

**Pad Connections** (Pins 6, 9 are internal use only and must be isolated.)

- 1 EFC
- 6 N/C
- 7 0V & Case Gnd
- 8 Output
- 9 N/C
- 14 V Supply

Contact Factory to inquire about custom parameters.

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