



frequency control solutions

texo

T79

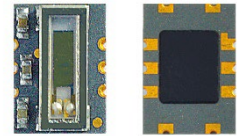
**TIGHT STABILITY
LOW ACCELERATION SENSITIVITY**

Product Description

Greenray Industries' T79 Series TCXO has been developed as a reference oscillator for timing applications requiring very low g-Sensitivity performance and tight temperature stability.

Features

- Frequency Range: 10 to 52MHz
- g-Sensitivity to $<3 \times 10^{-10}/g$
- Shock to 30,000g
- Temperature Stability to $\pm 0.1\text{ppm}$ over -20 to $+70^\circ\text{C}$
- Rugged 5.0 x 7.0 mm package
- Low g-Sensitivity and Tight Stability in a compact, SMT package
- Industry Standard Footprint
- +5.0V or +3.3V Options



Applications

- Telecommunications
- High-shock electronics
- Mobile instrumentation
- Airborne communications
- Wireless communications
- Microwave receivers
- Smart munitions

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T79 SERIES
10 MHz to 52 MHz



Electrical Characteristics

Electrical Characteristics						
Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
Nominal Frequency	+25°C	10		52	MHz	
Frequency Stability	-10°C to +60°C		± 0.1		ppm	G17
	-20°C to +70°C		± 0.1		ppm	N17
	-40°C to +85°C		± 0.3		ppm	T37
	-55°C to +95°C		± 1.0		ppm	V17
Aging	1 st year		± 0.5	± 1	ppm	
Acceleration Sensitivity	Worst Axis (1)			2.0	ppb/g	SD
				0.8	ppb/g	LG
				0.5	ppb/g	ULG
Electronic Frequency Control	EFC = 0 to Supply Voltage @ Positive Slope		± 7		ppm	
Frequency vs. Reflow	After 24 hrs recovery			1	ppm	
DC Supply						
Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
Supply Voltage		3.0	3.3	3.6	Vdc	3.3
		4.75	5.0	5.25	Vdc	5.0
Supply Current	CMOS			6	mA	
	Clipped Sine			3	mA	
RF Output						
Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
CMOS						C
Load			15		pF	
Levels	Supply=3.3 V	+ 2.8 ("1"Level)		+ 0.2 ("0"Level)	V	
	Supply=5.0 V	+ 4.2 ("1"Level)		+ 0.2 ("0"Level)	V	
Symmetry		40	50	60	%	
Clipped Sine						S
Load			10pF//10KΩ			
Level		+ 0.8			V p-p	

- (1) Acceleration sensitivity is measured at 90 Hz with 10 g's
 (2) Some combinations of options may not be available



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Environmental Ratings

Environmental			
Test	Standard	Method, Condition	Description
Vibration	MIL-STD-202G	214A, I-F	0.3 PSD, 20.71 g RMS
Shock	MIL-STD-202G	213, I	100 g, 5 ms, Sawtooth Custom Requirements are Available

Recommendations and General Information

Information	
Parameter	Notes
Operating Temperature	-55°C to +95°C
Storage Temperature	-60°C to +125°C
Terminal Finish	Au Plated (RoHS) STD, Sn63Pb37 (non-RoHS) available
Package Weight	3 grams
Soldering Instruction	Reflow
Shipping	Tray Pack, Tape & Reel

Ordering Example

T79	N28	S	5.0	LG	10 MHz	E
Model	Stability	Output	Input Voltage	g-Sensitivity	Freq. (MHz)	Term. Finish
	G17: -10°C to +60°C N17: -20°C to +70°C T37: -45°C to +85°C V17: -55°C to +95°C	S: Clipped Sine C: CMOS	3.3 V 5.0 V	SD: STD LG: Low G ULG: Ultra-Low G	10 MHz – 52 MHz	E: Au Plated (RoHS) LF: Sn96.5Ag3.5 PB: Sn63Pb37



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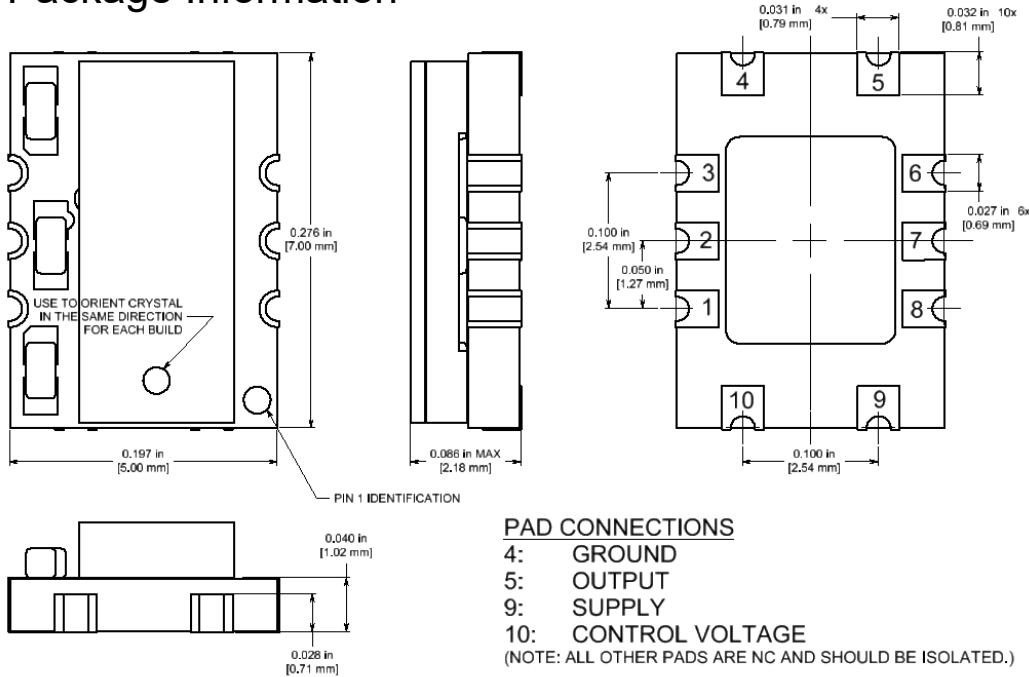


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Package Information



Preliminary Specification

The specifications on this datasheet pertain to a product which is under engineering development. Contact the factory to determine the current availability.



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