



frequency control solutions

T1244

LOW PHASE NOISE

tcxo

Product Description

Greenray Industries' T1244 TCXO offers excellent phase noise performance.



Features

- 14.2 x 9.1 mm SMT compact package
- Low Phase Noise: -154 dBc/Hz @ 10 kHz offset
- Robust package withstanding shocks and vibrations
- +3.3 VDC supply
- LVPECL output



Applications

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

REV: J



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frequency control solutions

T1244 SERIES
50 MHz to 150 MHz



Electrical Characteristics

Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
Nominal Frequency	@ +25°C	50.0		150.0	MHz	(FREQ.)
	-40°C to +85°C		± 1.0		ppm	T16
	-40°C to +85°C		± 2.0		ppm	T26
	-55°C to +85°C		± 2.0		ppm	U26
	-55°C to +95°C		± 3.0		ppm	V36
Frequency Stability	1 st year			± 1.0	ppm	
	10 years			± 5.0	ppm	
Acceleration Sensitivity	Worst axis tested @ 90 Hz, 10 g			2.5	ppb/g	SG
Frequency vs Reflow	After 24 hrs recovery			± 1.0	ppm	
Frequency vs Voltage	For a 5% Change			± 0.3	ppm	
Frequency vs Load	For a 10% change			± 0.1	ppm	
Voltage Control (EFC)	0 to +3.0V, Positive Slope	± 5.0			ppm	

Phase Noise Performance

Parameter	Frequency Offset (Hz)	Min	Typical	Max	Units	Ordering Code
Static @ 20 MHz Nom. Freq.	10		-75		dBc/Hz	
	100		-112		dBc/Hz	
	1 k		-140		dBc/Hz	
	10 k		-154		dBc/Hz	
	100 k		-157		dBc/Hz	

DC Supply

Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
Supply Voltage		3.0	3.3	3.6	Vdc	B
Supply Current				65	mA	

RF Output

Parameter	Conditions	Min	Typical	Max	Units	Ordering Code
LVPECL						LP
Load			50		Ω	
Level		0.6		-2	Vp-p	
Rise / Fall Time	20% to 80%			1	nSec	



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Environmental and Mechanical Specifications				
Test	Standard	Method	Condition	Description
Vibration	MIL-STD-202	201 & 204		10 g, 20 to 2,000 Hz, swept sine
Shock	MIL-STD-202	213	C	100 g, 6 ms, half sine

Recommendations and General Information	
Parameter	Notes
Operating Temperature	-55°C to +95°C
Storage Temperature	-55°C to +105°C
Terminal Finish	ENIG (RoHS) (SnPb 63/37 (non-RoHS) Available upon request)
Package Weight	3 grams
Soldering Instruction	Reflow
Shipping	Tray Pack, Tape & Reel
Marking	GRI Logo, Model #, Frequency, Serial #, Date Code Addition marking upon request if space is available

Ordering Example								
T1244	-	T	-	36	-	SG	-	50.0 MHz
Model	Temp. Range	Stability	G-Sensitivity	Freq. (MHz)				
	T: -40 to +85°C U: -55 to +85°C V: -55 to +95°C	16: ±1ppm 26: ±2ppm 36: ±3ppm	SG: ≤ 2.5 ppb/g HG: Customer-specific	50 to 150				

The Order ID (T1244-T36-SG-50.0MHz) is only used to issue the preliminary quote. The Part Number (T1244-1) for the quoted Electrical Characteristics, Screenings, and other options, will be provided with the Greenray Sales Order.

Other specification options are available, please use the contact information below for more information.



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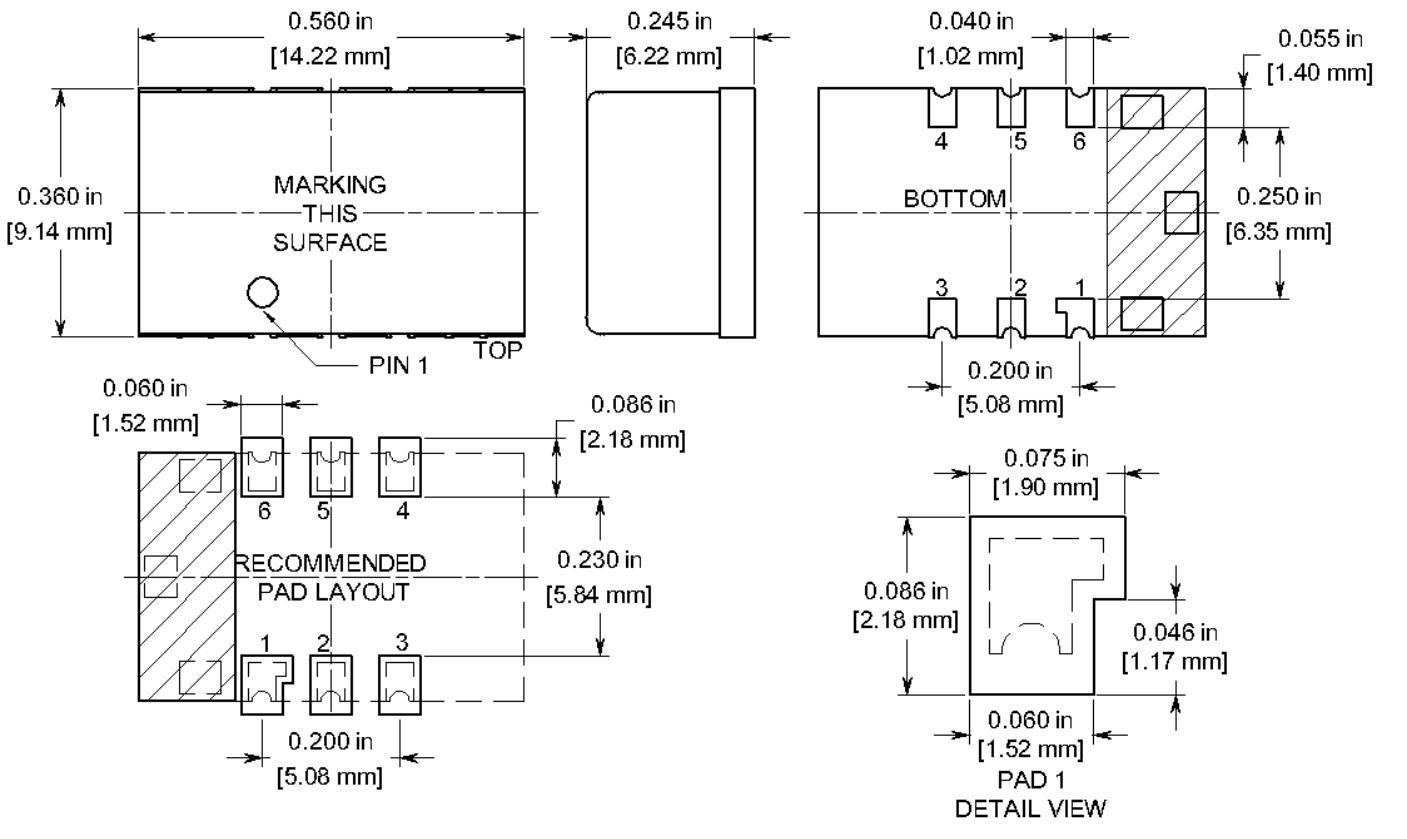


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texo

Package Information



PAD/PIN CONNECTIONS	
1	CONTROL VOLTAGE (EFC)
2	NO CONNECT (NC)
3	GND
4	OUTPUT
5	OUTPUT (-)
6	SUPPLY VOLTAGE (Vdd)

(NC Pads/Pins may have internal connections and should be isolated)



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