## **SMD TCXO/VCTCXO for GPS Applications**



Model: FOX923\_-GP SERIES RoHS Compliant / Pb Free

Rev. 4/13/20

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## Need a Sample

## **FEATURES**

## **OPTIONS**

· Voltage Control

- 0.5PPM Stability
- Supply Voltages of 1.8V ~ 3.3V
- 1.2 mm Max Height
- Clipped SINE Output

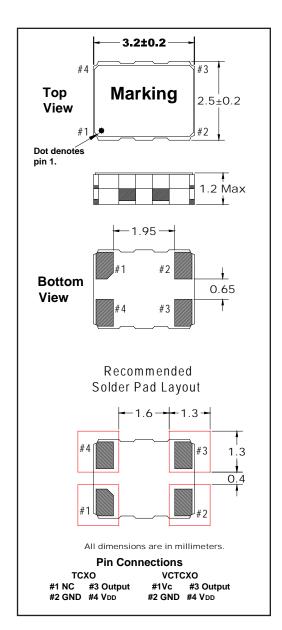
PART NUMBER SELECTION Learn More - Internet Required					
Part Number	Model Number	Supply Voltage (VDD)	TCXO/VCTCXO		
673CGP-Frequency-xxxxx	FOX923C-GP	3.3V ±5%	TCXO		
638CGP-Frequency-xxxxx	FOX923CE-GP	3.3V ±5%	VCTCXO		
673GP-Frequency-xxxxx	FOX923B-GP	3.0V ±5%	TCXO		
638GP-Frequency-xxxxx	FOX923E-GP	3.0V ±5%	VCTCXO		
673DGP-Frequency-xxxxx	FOX923D-GP	2.8V ±5%	TCXO		
638DGP-Frequency-xxxxx	FOX923DE-GP	2.8V ±5%	VCTCXO		
673FGP-Frequency-xxxxx	FOX923F-GP	2.7V ±5%	TCXO		
638FGP-Frequency-xxxxx	FOX923FE-GP	2.7V ±5%	VCTCXO		
673GGP-Frequency-xxxxx	FOX923G-GP	2.5V ±5%	TCXO		
638GGP-Frequency-xxxxx	FOX923GE-GP	2.5V ±5%	VCTCXO		
673LGP-Frequency-xxxxx	FOX923L-GP	1.8V ±5%	TCXO		
638LGP-Frequency-xxxxx	FOX923LE-GP	1.8V ±5%	VCTCXO		

• ELECTRICAL CHARACTERISTICS				
PARAMETERS	MAX (unless otherwise noted)			
Frequency Range (Fo)	See Table Below			
Temperature Range				
Operating (TOPR)	-30°C ~ +85°C			
Storage (Tstg)	-40°C ~ +90°C			
Supply Voltage (VDD)	1.8V ~ 3.3V			
Input Current (IDD)	2.0mA			
Initial Frequency Tolerance @ 25°C (after 2 reflows)				
$(VCTCXO: Vc = 0.5VDD)^{1}$	±2.0 PPM			
Frequency Stability				
Over Temperature Range	±0.5 PPM			
Over Supply Voltage Change (VDD ± 5%)	±0.3 PPM			
Over Load Change (10KΩ ±10%//10pF±10%)	±0.2 PPM			
Output Waveform (Clipped Sine)				
Peak-to-Peak Level (Vp-p)	0.8V Min			
Output Load	10KΩ ±10% // 10pF ±10%			
Pullability	•			
$V_{DD} = 2.5V \sim 3.3V, V_{C} = 50\% V_{DD} \pm 1.0V$	±5 ~ ±15PPM			
$V_{DD} = 1.8V, V_{C} = 0.9V \pm 0.6V$	±3 ~ ±5PPM			
Aging per year	±1.0PPM			
Phase Noise (26.000MHz, @ 10kHz offset)	-145 dBc/Hz Typical			
Reflow Soldering Temp	260°C / 10 Seconds			
Moisture Sensitivity Level (MSL)	1			
Termination Finish	Au			

• STANDARD FREQUENCIES <sup>2&amp;3</sup>					
13.000MHz	16.367 MHz	16.3676 MHz	16.367667 MHz		
16.367677 MHz	16.368 MHz	16.369 MHz	16.800 MHz		
19.200 MHz	23.104 MHz	24.5535 MHz	26.000 MHz		
27.456 MHz					

<sup>&</sup>lt;sup>1</sup>For proper operation, a control Voltage (Vc) must be applied to pin 1 on VCTCXO's.

All specifications subject to change without notice.



<sup>&</sup>lt;sup>2</sup>Does not imply a stocked part. All frequencies may not be available for all VDD.

<sup>&</sup>lt;sup>3</sup>Other fequencies may be available. Contact Fox Technical support with your requirements.

<sup>\*</sup>Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may very.