SMD TCXO/VCTCXO for GPS Applications

Model: FOX923_-GP SERIES   RoHS Compliant / Pb Free

Need a Sample®

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

OPTIONS
- Voltage Control

• PART NUMBER SELECTION Learn More - Internet Required

Part Number	Model Number	Supply Voltage (V_{DD})	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 (F_O)	See Table Below
Temperature Range	
Operating (T_{OPR})	-30ºC ~ +85ºC
Storage (T_{STG})	-40ºC ~ +90ºC
Supply Voltage (V_{DD})	1.8V ~ 3.3V
Input Current (I_{DD})	2.0mA
Initial Frequency Tolerance @ 25ºC (after 2 reflows) (VCTCXO: $V_C = 0.5V_{DD}$)[1]	±2.0 PPM
Frequency Stability	
Over Temperature Range	±0.5 PPM
Over Supply Voltage Change (V_{DD} ± 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~3.3V, V_C = 50% V_{DD} ±1.0V	±5 ~ ±15PPM
V_{DD} = 1.8V, V_C = 0.9V ±0.6V	±3 ~ ±5PPM
Aging per year	±1.0PPM
Phase Noise (26.000MHz, @ 10kHz offset)	-145 dBc/Hz Typical
Reflow Soldering Temp	260ºC / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au

Top View — Marking — 3.2±0.2, 2.5±0.2
Dot denotes pin 1.

1.2 Max

Bottom View — 1.95, 0.65

Recommended Solder Pad Layout — 1.6, 1.3, 1.3, 0.4

All dimensions are in millimeters.

Pin Connections

TCXO		VCTCXO	
#1 NC	#3 Output	#1Vc	#3 Output
#2 GND	#4 V_{DD}	#2 GND	#4 V_{DD}

• STANDARD FREQUENCIES[2][3]

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			

[1]For proper operation, a control Voltage (Vc) must be applied to pin 1 on VCTCXO's.
[2]Does not imply a stocked part. All frequencies may not be available for all V_{DD}.
[3]Other fequencies may be available. Contact Fox Technical support with your requirements.
*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.
All specifications subject to change without notice.