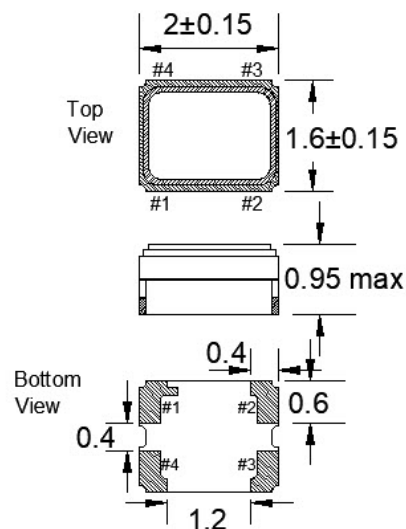




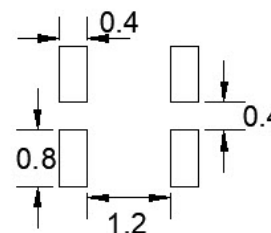
- Analog Temperature Compensation

### ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	8.000 ~ 52.000 MHz
Temperature Range	
Operating (TOPR)	-30°C ~ +85°C
Storage (TSTG)	-40°C ~ +85°C
Supply Voltage (VDD)	1.8V±5% ~ 3.0V±5% <sup>1</sup> (See ordering guide on page 2)
Input Current (IDD)	
8.0 ~ 32.0 MHz	1.5 mA
>32.0 ~ 52.0 MHz	2.0 mA
Initial Frequency Tolerance @ 25°C (after reflow) (VCTCXO: Vc = 0.5VDD) <sup>2</sup>	±2 PPM
Frequency Stability	
Over Temperature Range	(See ordering guide on page 2)
Over Supply Voltage Change (VDD±5%)	±0.1 PPM
Over Load Change [(10kΩ/10pF)±10%]	±0.1 PPM
Output Waveform (Clipped Sine) Peak-to-Peak Level (Vp-p)	0.8V min
Output Load	(10kΩ // 10pF)±10%
Pullability (VCTCXO) <sup>2</sup>	
VDD = 1.8V: Vc = 0.9V±0.8V	±8 ~ ±13 PPM nom
VDD = 3.0V: Vc = 1.5V±1.5V	
Aging per year	±1.0 PPM
Reflow Soldering Temp	260°C / 10 Seconds x2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni



#### Recommended Solder Pad Layout



Dimensions are in millimeters.

<sup>1</sup> TCXO is operable from 1.7V to 3.3V. VCTCXO only operable at specified voltage.

<sup>2</sup> For proper operation, a control voltage (Vc) must be applied to pin 1 on VCTCXO's.

Note: A DC-Cut capacitor (1000pF) should be connected to the output.

Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.



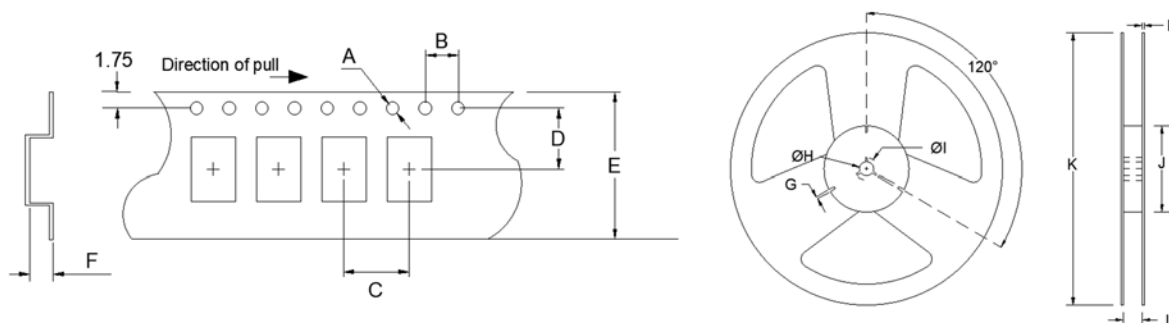


# 2.0 x 1.6 mm TCXO / VCTCXO

# T1CN/T1CV

# DATASHEET

TAPE SPECIFICATIONS (millimeters)							REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	Reel Qty	G	H	I	J	K	L	M
Ø1.5	4.0	4.0	3.5	8.0	1.4	-T3 = 3,000 -T2 = 2,000 -T1 = 1,000	2.0	Ø13	Ø21	Ø60	Ø180	9.0	1.4



## Available Options & Part Identification

Example: F T1CV K R K 38.4

F	T1CV	K	R	K	38.4
Fox	Model Number T1CN = TCXO T1CV = VCTCXO	Voltage K = 1.8V±5% D = 3.0V±5%	Stability R = ±2.0PPM P = ±2.5PPM	Operating Temperature K = -30 to +85C	Frequency



Corporate Headquarters  
5570 Enterprise Parkway  
Fort Myers, FL 33905  
<http://www.FOXONLINE.com>

Sales  
1-888-GET-2-FOX (1-888-438-2369) or  
1-239-693-0099  
<http://www.FOXONLINE.com/repdisty>

Tech Support  
<http://www.FOXONLINE.com/email>

Product use: Fox Electronics reserves the right to modify the products and/or specifications described herein at any time and at Fox Electronics' sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of Fox Electronics' products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of Fox Electronics or any third parties.

Fox Electronics' products are not intended for use in applications involving extreme environmental conditions or in life support systems or similar devices where the failure or malfunction of a Fox Electronics product can be reasonably expected to significantly affect the health or safety of users. Anyone using a Fox Electronics product in such a manner does so at their own risk, absent an express, written agreement by Fox Electronics.

Fox Electronics and the Fox logo are registered trademarks of Fox Electronics. Product specification is subject to change without notice. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of Fox Electronics or their respective third-party owners.

For datasheet type definitions and a glossary of common terms, visit <http://www.foxonline.com/tgcrystals.html>.



© Copyright 2019 Fox Electronics. All rights reserved

<b>Title / Description: T1CN/T1CV Series Specifications</b>	
<b>Drawing Number:</b> T1CN-T1CV-DOC-1	<b>Size:</b> A
<b>Part Number:</b>	<b>Cage:</b> 61429
<b>Draftsperson:</b> MAJ	<b>Approved:</b> BEC
	<b>Rev. Date:</b> 08/15/2019