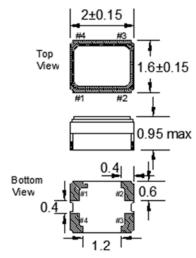


### 2.0 x 1.6 mm TCXO/VCTCXO - GPS

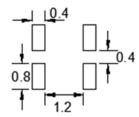
# T1GN/T1GV DATASHEET

- Analog Temperature Compensation
- GPS applications

ELECTRICAL CHARACTERISTICS						
PARAMETERS	<b>MAX</b> (unless otherwise noted)					
Frequency Range (Fo)	8.000 ~ 52.000MHz					
Temperature Range Operating (T <sub>OPR</sub> ) Storage (T <sub>STG</sub> )	-30°C ~ +85°C -40°C ~ +85°C					
Supply Voltage (V <sub>DD</sub> )	$1.8V\pm5\% \sim 3.0V\pm5\%^{1}$ (See ordering guide on page 2)					
Input Current (I <sub>DD</sub> ) 8.0 ~ 32.0MHz >32.0 ~ 52.0MHz	1.5 mA 2.0 mA					
Initial Frequency Tolerance @ 25°C (after reflow) (VCTCXO: Vc = 0.5V <sub>DD</sub> ) <sup>2</sup>	±2PPM					
Frequency Stability Over Temperature Range Over Supply Voltage Change (V <sub>DD</sub> ±5%) Over Load Change [(10kΩ//10pF)±10%]	±0.5PPM ±0.1PPM ±0.1PPM					
Frequency Slope (-30 ~ +85°C) (-20 ~ +65°C)	±0.1PPM/°C ±0.05PPM/°C					
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 VDD = 3.0V: Vc = 1.5V±1.5V	±8 ~ ±13 PPM nom					
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.

### Pin Connections

T'	1 GN	T1	GV
#1 GND	#3 Output	#1 Vc	#3 Output
#2 GND	#4 Vop	#2 GND	#4 Vpp

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.



 $<sup>^{\</sup>rm 1}$  TCXO is operable from 1.7V to 3.3V. VCTCXO only operable at specified voltage.

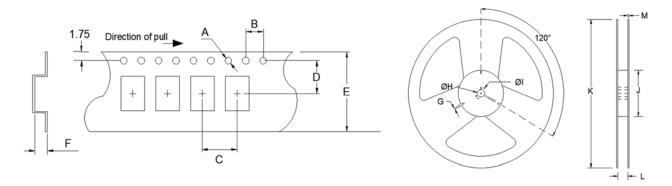
<sup>&</sup>lt;sup>2</sup> For proper operation, a control voltage (Vc) must be applied to pin 1 on VCTCXO's.



### 2.0 x 1.6 mm TCXO/VCTCXO - GPS

# T1GN/T1GV DATASHEET

TAPE SPECIFICATIONS (millimeters)			F	REEL S	SPECIF	ICATIO	NS (milli	meter	s)				
Α	В	С	D	Е	F	Reel Qty	G	Н	I	J	K	L	М
Ø1.5	4.0	4.0	3.5	8.0	1.4	-T3 = 3,000 -T2 = 2,000 -T1 = 1,000	2.5	Ø13	Ø21	Ø60	Ø180	9.0	1.4



## Available Options & Part Identification Example: <u>F T1GN K U K 38.4</u>

F	T1GN	K	R	K	38.4
Fox	Model Number T1GN = TCXO	Voltage K = 1.8V±5%	Stability U = ±0.5PPM	Operating Temperature K = -30 to +85C	Frequency
	T1GV = VCTCXO	D = 3.0V±5%			



### **Corporate Headquarters**

5570 Enterprise Parkway Fort Myers, FL 33905 http://www.FOXONLINE.com

#### Sales

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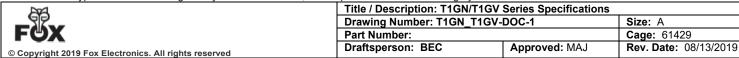
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