

# FT3HV

(Former FOX923CEH)

3.2mm x 2.5mm

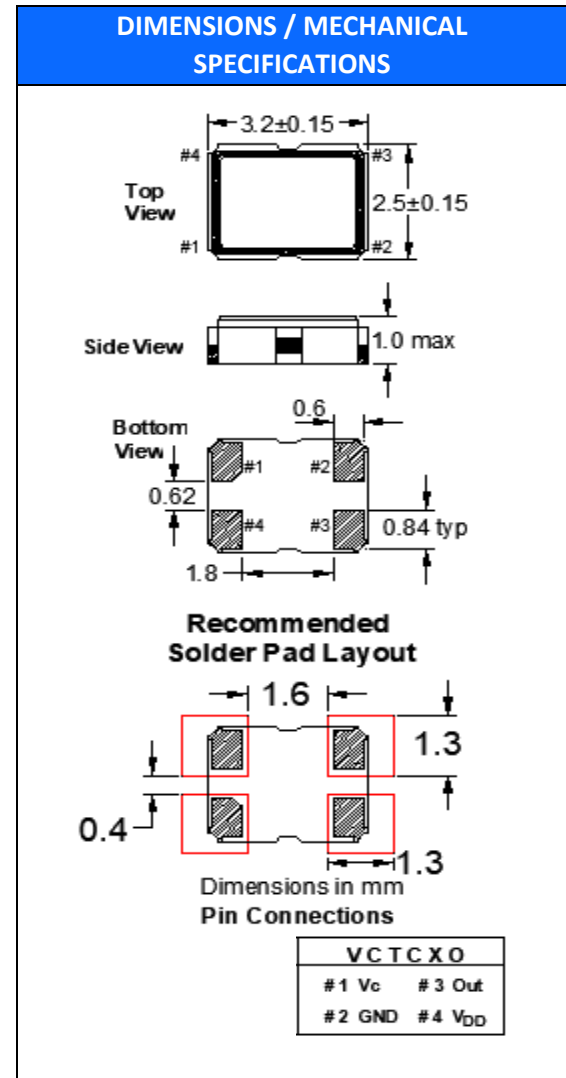
HCMOS VCTCXO



## Features

- Digital Temperature Compensation

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range (MHz)	8.0 ~ 40.000
Temperature Range	
Operating (T <sub>OPR</sub> )	(See table below)
Storage (T <sub>STG</sub> )	-40°C ~ +90°C
Supply Voltage (V <sub>DD</sub> )	+3.3 V <sub>DC</sub> ±5%
Input Current (I <sub>DD</sub> )	6.0 mA
Initial Frequency Tolerance @ 25°C (after reflow) (T3HV: V <sub>c</sub> = 1.66V) <sup>1</sup>	±2.0 PPM
Frequency Stability	
Over Temperature Range	See table below
Over Supply Voltage Change (3.3V±5%)	±0.3 PPM
Over Load Change (15pF ±5%)	±0.3 PPM
Rise Time (10% ~90% V <sub>DD</sub> )	5nS
Fall Time (90% ~10% V <sub>DD</sub> )	5nS
Symmetry (50% V <sub>DD</sub> )	40% ~ 60%
Output Voltage (V <sub>OL</sub> )	10% V <sub>DD</sub>
(V <sub>OH</sub> )	90%V <sub>DD</sub> Min
Output Load (C <sub>L</sub> )	15pF
Pullability (T3HV: V <sub>c</sub> = 1.65V±1.0V) <sup>1</sup>	±3 ~ ±15 PPM
Aging per year	±1.0 PPM
Startup Time (T <sub>s</sub> )	3.0 mS
Phase Noise @ 1kHz offset	-130 dBc/Hz Typical
Reflow Soldering Temp	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Lead-Free	Yes
RoHS/REACH Compliant	Yes



Available Options by Stability & Operating Temp					
Operating Temperature	±1 PPM	±1.5 PPM	±2 PPM	±2.5 PPM	±15 PPM
-30 ~+85°C	O	O	O	O	NA
-40 ~+85°C	Δ	O	O	O	NA
-40 ~+105°C	X	X	X	X	O

Key: O=Available, X=Not Available, NA=Not Applicable, Δ = Consult Fox Engineering

<sup>1</sup>For proper operation, a control voltage (V<sub>c</sub>) must be applied to pin 1 of VCTCXO's. All specifications subject to change without notice.

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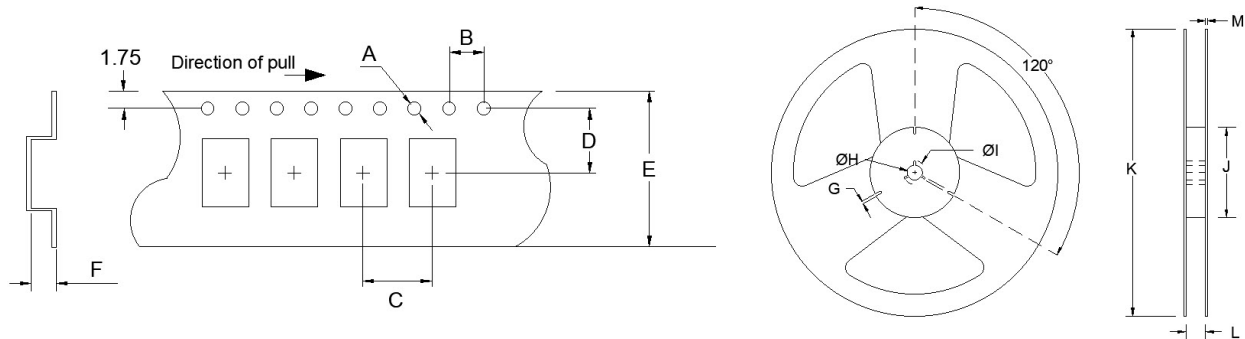
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TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	4.0	3.5	8.0	1.4	-T3 = 3,000 default -T2 = 2,000 -T1 = 1,000	2.0	ø13	ø21	ø60	ø180	9.0	1.5



## Available Options & Part Identification for VCTCXO Model T3HV<sup>1</sup>

Sample PN: **FT3HVBPK25.0-T3**

F	T3HV	B	P	K	25.0	-T3
<b>Fox</b>	<b>Model Number</b> T3HV = VCTCXO	<b>Tolerance</b> B = +3.3V±5%	<b>Stability</b> T = ±1.0 PPM S = ±1.5 PPM R = ±2.0 PPM <b>P = ±2.5 PPM</b> F = ±15 PPM	<b>Operating Temperature</b> K = -30 to +85°C M = -40 to +85°C P = -40 to +105°C	<b>Frequency (MHz)</b>	<b>Values Added Options</b> Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs <b>T3 = 3,000 pcs</b>

<sup>1</sup> Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities/operating temp table.

### Reliability Test Conditions

Please contact Abracon Quality Assurance department