

5.0x3.2mm HCMOS TCXO/VCTCXO

T5HN/T5HV (former FOX924B, FOX924E) DATASHEET

Digital Temperature Compensation

ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (MHz)	8.000 ~ 40.000
Temperature Range Operating (T _{OPR}) Storage (T _{STG})	See table below -40°C ~ +85°C
Supply Voltage (V _{DD})	+3.3 VDC ± 5%
Input Current (I _{DD})	6.0mA
Initial Frequency Tolerance @ 25°C (after reflow) (T5HV: Vc = 1.65V) ¹	±2.0 PPM
Frequency Stability Over Temperature Range Over Supply Voltage Change (3.3V±5%) Over Load Change (15pF ±5%)	See table below ±0.3 PPM ±0.3 PPM
Rise Time $(0.5V \sim 80\% \text{ V}_{DD})$ Fall Time $(80\% \text{ V}_{DD} \sim 0.5V)$	10nS 10nS
Symmetry (50% V _{DD})	40% ~ 60%
Output Voltage (VoL) (Vон)	0.5V 80% V _{DD} Min
Output Load	15pF
Pullability (T5HV: Vc = 1.65V±1.0V) ¹	±3 ~ ±20 PPM min
Aging per year	±1.0 PPM
Startup Time (T _S) (to 90% output level)	2.0mS Max
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

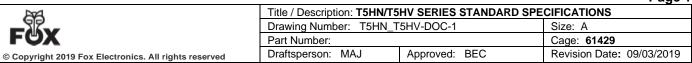
Bottom View 1.6 0.7 #4 1.1 Recommended Solder Pad Layout 2.4 1.3 1.2 Dimensions in mm Pin Connections T5HN T5HV #1 GND #3 Output #2 GND #4 Vpp #2 GND #4 Vpp #2 GND #4 Vpp	Top View 3.2±0.15					
Recommended Solder Pad Layout 2.4 1.3 1.2 Dimensions in mm Pin Connections T5HN T5HV #1 GND #3 Output #1 Vc #3 Output	# ■ \$1.5 Max					
Dimensions in mm Pin Connections T5HN T5HV #1 GND #3 Output #1 Vc #3 Output	Bottom View 1.6					
Pin Connections T5HN T5HV #1 GND #3 Output #1 Vc #3 Output	Recommended Solder Pad Layout					
Pin Connections T5HN T5HV #1 GND #3 Output #1 Vc #3 Output	1.3					
T5HN T5HV #1 GND #3 Output #1 Vc #3 Output						
#1 GND #3 Output #1 Vc #3 Output						
#1 GND #3 Output #1 Vc #3 Output #2 GND #4 V _{DD} #2 GND #4 V _{DD}						
	#1 GND #3 Output #1 Vc #3 Output #2 GND #4 V _{DD} #2 GND #4 V _{DD}					

Operating Temperature	±1 PPM	±1.5 PPM	±2 PPM	±2.5 PPM
-30 ~+85°C	0	0	0	0
-40 ~+85°C	Х	0	0	0

Key: O=Available, X=Not Available

¹For proper operation, a control voltage (Vc) must be applied to pin 1 of VCTCXO's. All specifications subject to change without notice.

Page 1 of 2





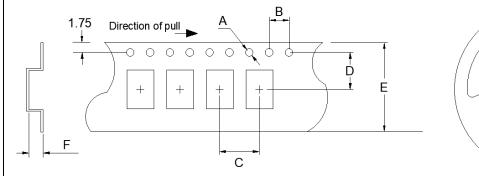
5.0x3.2mm HCMOS TCXO/VCTCXO

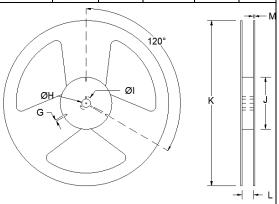
T5HN/T5HV

(former FOX924B, FOX924E)

DATASHEET

Tape Specifications (millimeters)					Reel	Specific	ations (millimete	ers)				
A	В	C	D	E	F	Reel Qty	G	Н	I	J	K	L	M
Ø1.5	4.0	8.0	5.5	12.0	1.7	-T1 = 1,000	2.0	Ø13	Ø21	Ø80	Ø180	13.5	2.0





Available Options & Part Identification for TCXO Model T5HN/T5HV¹ F T5HN B P K 25.0

F	T5HN	В	P	K	25.0
<u>FOX</u>	Model Number T5HN = TCXO T5HV = VCTCXO	<u>Voltage</u> B = +3.3V±5%	Stability T = ±1.0 PPM S = ±1.5 PPM R = ±2.0 PPM P = ±2.5 PPM	Operating Temperature K = -30 to +85°C M = -40 to +85°C	Frequency (MHz)

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



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.

Page 2 of 2



	Title / Description: T5HN/T5HV SERIES STANDARD SPECIFICATIONS						
	Drawing Number: T5HN_T	Size: A					
	Part Number:	Cage: 61429					
d	Draftsperson: MAJ	Approved: BEC	Revision Date: 09/03/2019				

© Copyright 2019 Fox Electronics. All rights reserved