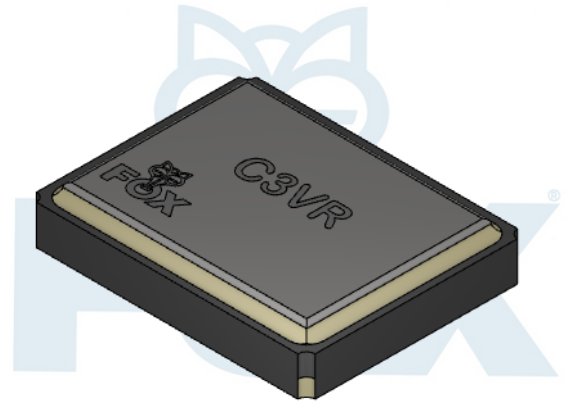
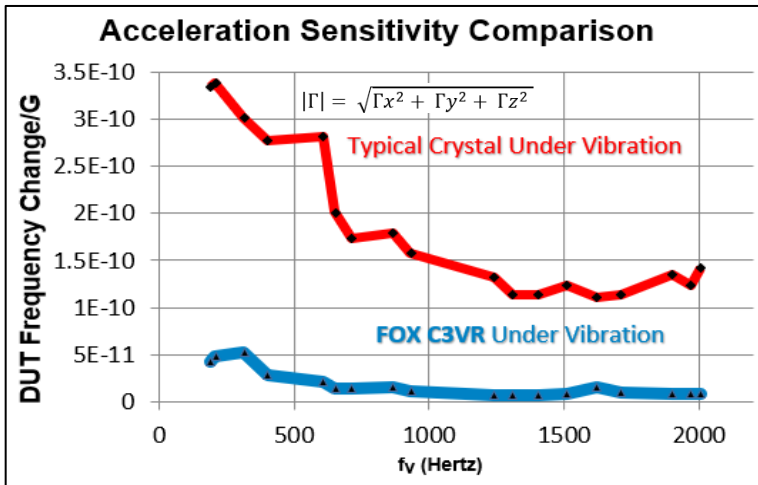




# 3.2mm x 2.5mm Vibration Resistant Crystal

# C3VR DATASHEET

- Low G sensitivity
- Tolerances down to  $\pm 10$  ppm
- Custom application inquiries invited
- Patented Technology

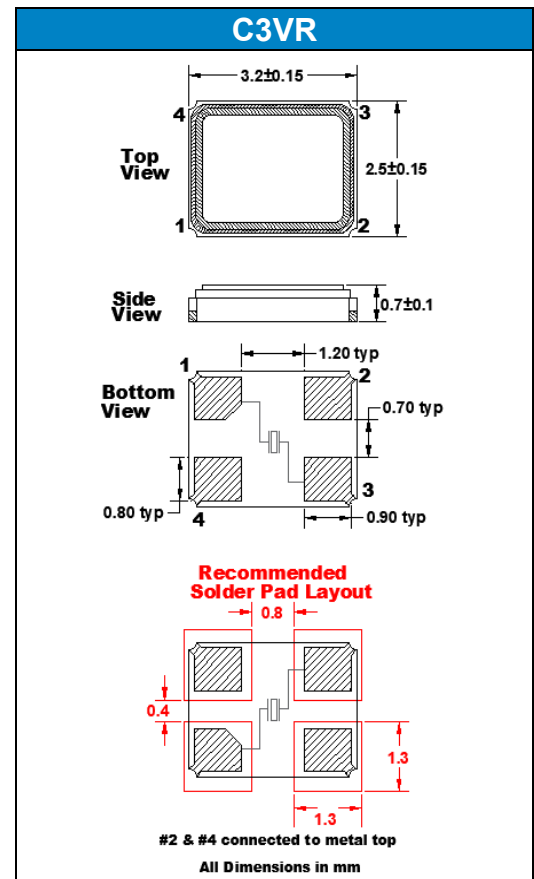


3D part view for IE and Acrobat Reader  
©Fox Electronics 2020

C3VR STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	33 ~ 52 MHz
Resonance Mode	Fundamental
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref 25°C	(See options below)
Temperature Range	
Operating ( $T_{OPR}$ )	(See options below)
Storage ( $T_{STG}$ )	-55°C ~ +125°C
Equivalent Series Resistance (ESR)	60Ω Max
Shunt Capacitance ( $C_o$ )	3.0 pF
Load Capacitance ( $C_L$ )	(See options on page 2)
Drive Level	0.1 mW
Aging per year	$\pm 5$ PPM
<b>Vibration Sensitivity</b>	<b>0.2 ppb/G</b>
Maximum Soldering Temp / Time	260°C / 10 Seconds x2
Moisture Sensitivity Level (MSL) per J-STD-033	N/A
Termination Finish	Au (0.3~0.75μm) over Ni (1.27~8.89μm)
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant (latest version)	Yes

AVAILABLE OPERATING TEMPERATURES AND STABILITIES				
Operating Temperature	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM
-20 ~ +70°C	O	O	O	O
-40 ~ +85°C	O	O	O	O

Key: O = Available



7/23/2020 - Added thickness info to termination metals, adjusted MSL info to include J-STD-033 and N/A.

© Copyright 2020 Fox Electronics. All rights reserved

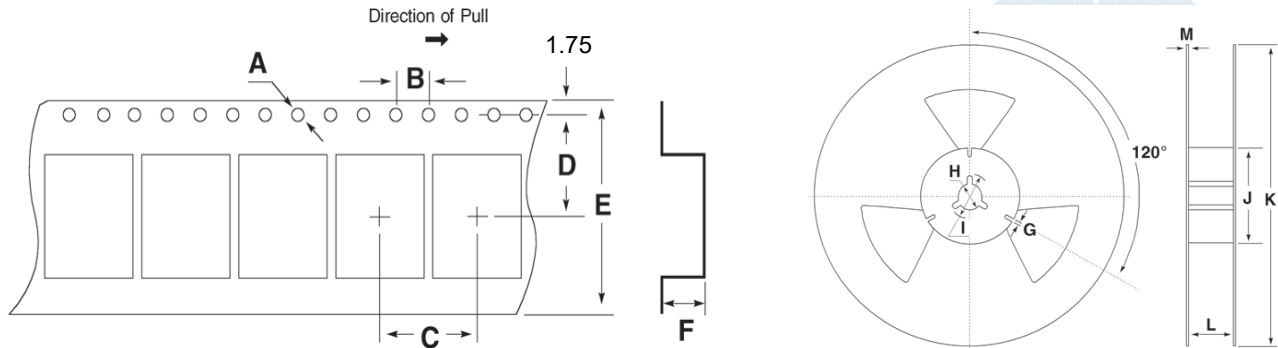
<b>Title / Description:</b> C3VR SERIES STANDARD SPECIFICATIONS	
<b>Drawing Number:</b> C3VR-DOC-DS	<b>Rev:</b> D
<b>Status:</b> Released	<b>Case:</b> 61429
<b>Draftsperson:</b> BEC	<b>Approved:</b> MAJ
<b>Revision Date:</b> 10/29/2020	



# 3.2mm x 2.5mm Vibration Resistant Crystal

# C3VR DATASHEET

• 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	1.3	-T3 = 3,000 default -T1 = 1,000		2.0	Ø13	Ø21	Ø80	Ø180	9.0	2.0



## Available Options & Part Identification for Crystal Model C3VR<sup>1</sup>

### F C3VR E E G M 40.0

F	C3VR	E	E	G	M	40.0
<b>FOX</b>	<b>Model Number</b>	<b>Tolerance</b> B = ±50 PPM C = ±30 PPM D = ±25 PPM <b>E = ±20 PPM</b> F = ±15 PPM H = ±10 PPM	<b>Stability</b> B = ±50 PPM C = ±30 PPM D = ±25 PPM <b>E = ±20 PPM</b>	<b>Load Capacitance<sup>2</sup></b> V = 7 pF D = 8 pF W = 9 pF E = 10 pF <b>G = 12 pF</b> J = 15 pF K = 16 pF	<b>Operating Temperature</b> F = -20 to +70°C <b>M = -40 to +85°C</b>	<b>Frequency (MHz)</b>

<sup>1</sup>Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

<sup>2</sup>Listed load capacitances represent the most commonly used. Other load capacitances are available. Contact Fox Technical Support for assistance.



**Corporate Headquarters**  
5570 Enterprise Parkway  
Fort Myers, FL 33905  
<https://foxonline.com/>

**Sales**  
1-888-GET-2-FOX (1-888-438-2369) or  
1-239-693-0099  
<https://foxonline.com/representatives-distributors/>

**Tech Support**  
<https://foxonline.com/contact-us/>

**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>.

7/23/2020 - Added thickness info to termination metals, adjusted MSL info to include J-STD-033 and N/A.  © Copyright 2020 Fox Electronics. All rights reserved	<b>Title / Description:</b> C3VR SERIES STANDARD SPECIFICATIONS		
	<b>Drawing Number:</b> C3VR-DOC-DS		<b>Rev:</b> D
	<b>Status:</b> Released: 61429		<b>Case:</b> 61429
	<b>Draftsperson:</b> BEC	<b>Approved:</b> MAJ	<b>Revision Date:</b> 10/29/2020