



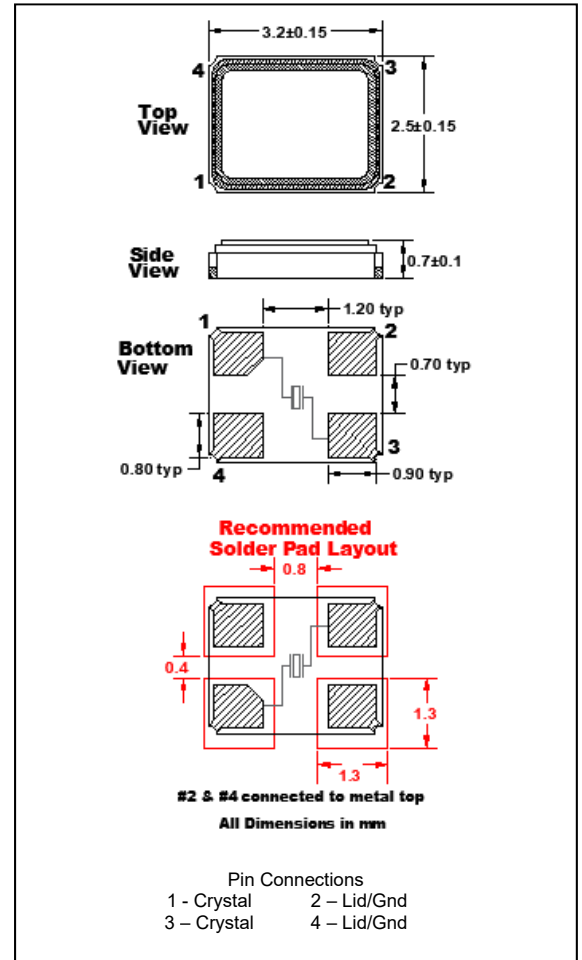
# 3.2mm x 2.5mm Ceramic SMD Crystal C3BS

(former FX325BS)

## DATASHEET

• C3BS STANDARD SPECIFICATIONS	
PARAMETERS	MAX(unless otherwise noted)
Frequency Range	8.000 ~ 200.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating (TOPR)	(See options below)
Storage (TSTG)	-55°C ~ +125°C
Shunt Capacitance (Co)	3.0 pF
Load Capacitance (CL)	(See options on page 2)
Drive Level	0.1 mW
Aging per year	±5 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
8.000 ~ 9.999999	Fundamental	500
10.000 ~ 11.999999	Fundamental	150
12.000 ~ 15.999999	Fundamental	80
16.000 ~ 19.999999	Fundamental	60
20.000 ~ 24.999999	Fundamental	50
25.000 ~ 53.999999	Fundamental	40
54.000 ~ 200.000	Fundamental	30
60.000 ~ 99.999999	3rd OT	150
100.000 ~ 124.999999	3rd OT	100
125.000 ~ 150.000	3rd OT	80



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.

### • Available Operating Temperatures and Stabilities\*

Operating Temperature	±5 PPM	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM	±100 PPM
0 ~ +70°C	X	O	O	O	O	O	O	N/A
-10 ~ +60°C	O	O	O	O	O	O	O	N/A
-10 ~ +70°C	X	O	O	O	O	O	O	N/A
-20 ~ +70°C	X	O	O	O	O	O	O	N/A
-30 ~ +85°C	X	X	O	O	O	O	O	N/A
-40 ~ +85°C	X	X	O	O	O	O	O	N/A
-40 ~ +105°C	X	X	X	X	X	X	O	O
-40 ~ +125°C	X	X	X	X	X	X	O	O
-55 ~ +125°C	X	X	X	X	X	X	O	O

Key: O=Available, X=Not Available, N/A=Not applicable \*Does not imply a stocked part.



Title / Description: C3BS SERIES STANDARD SPECIFICATIONS	
Drawing Number: 101138	Size: A
Part Number:	Cage: 61429
Draftsperson: MAJ	Approved: BEC
	Revision Date: 06/4/2019

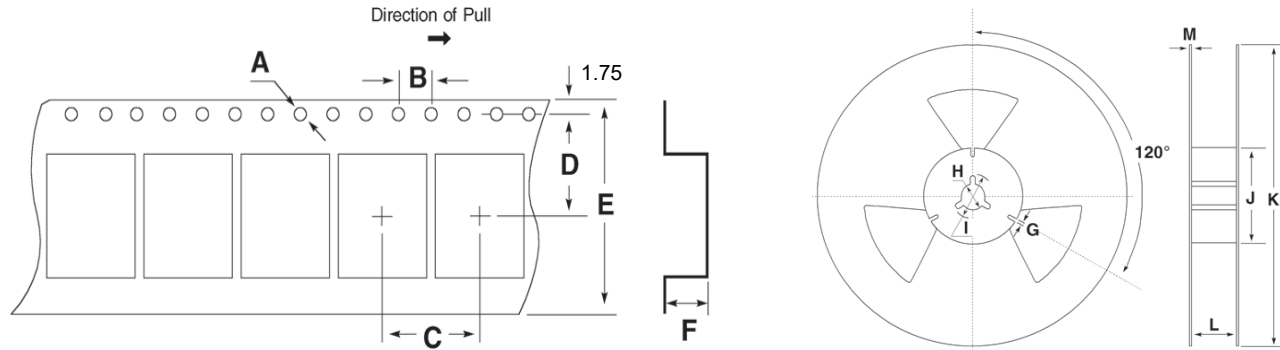


# 3.2mm x 2.5mm Ceramic SMD Crystal C3BS

(former FX325BS)

## DATASHEET

• TAPE SPECIFICATIONS (mm)							• REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	Reel QTY	G	H	I	J	K	L	M
Ø1.55	4.0	4.0	3.5	8.0	1.3	-T3 = 3,000 default -T2 = 2,000 -T1 = 1,000	2.0	Ø13	Ø21	Ø80	Ø180	9.0	2.0



Available Options & Part Identification for Crystal Model C3BS <sup>1</sup>						
<b>F C3BS B B G M 25.0</b>						
F	C3BS	B	B	G	M	25.0
FOX	Model Number	Tolerance	Stability	Load Capacitance <sup>2</sup>	Operating Temperature	Frequency (MHz)
		<b>B = ±50 PPM</b> C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	A = ±100 PPM <b>B = ±50 PPM</b> C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM L = ±5 PPM	V = 7 pF D = 8 pF W = 9 pF E = 10 pF <b>G = 12 pF</b> J = 15 pF K = 16 pF L = 18 pF M = 20 pF	C = 0 to +70°C D = -10 to +60°C E = -10 to +70°C F = -20 to +70°C K = -30 to +85°C <b>M = -40 to +85°C</b> P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C	

<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  
<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>.

<p>© Copyright 2019 Fox Electronics. All rights reserved</p>	<b>Title / Description:</b> C3BS SERIES STANDARD SPECIFICATIONS		
	<b>Drawing Number:</b> 101138		<b>Size:</b> A
	<b>Part Number:</b>		<b>Cage:</b> 61429
	<b>Draftsperson:</b> MAJ	<b>Approved:</b> BEC	<b>Revision Date:</b> 06/4/2019