



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





2.5x4.0mm Ceramic SMD Crystal C4BS

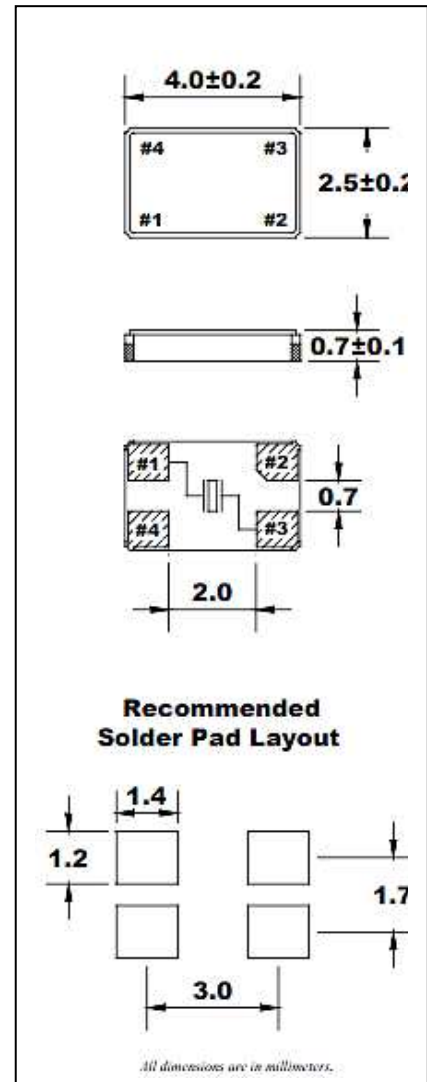
(former FX425B)

DATASHEET

- Tolerances down to ± 10 PPM
- Stabilities down to ± 5 PPM
- Temperature Ranges as wide as -40°C to $+85^{\circ}\text{C}$

• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	12.000 ~ 50.000 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 ~ $+125^{\circ}\text{C}$
Shunt Capacitance (Co)	5 pF
Load Capacitance (Cl)	(See options on page 2)
Drive Level	0.1 mW
Aging per year	± 5.0 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
12.000 ~ 12.999999	Fundamental	120
13.000 ~ 50.000	Fundamental	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*

Stability Temperature	± 5 PPM	± 10 PPM	± 15 PPM	± 20 PPM	± 25 PPM	± 30 PPM	± 50 PPM
-10°C to $+60^{\circ}\text{C}$	O	O	O	O	O	O	O
-20°C to $+70^{\circ}\text{C}$	X	O	O	O	O	O	O
-40°C to $+85^{\circ}\text{C}$	X	X	O	O	O	O	O

Key: O=Available, X=Not Available, Δ =Consult Fox Technical Support
 *Does not imply a stocked part.



© Copyright 2017 Fox Electronics, All rights reserved

Title / Description: C4BS SERIES STANDARD SPECIFICATIONS	
Drawing Number: 101172	Size: A
Part Number:	Cage: 61429
Draftsperson: MK	Approved: RB
	Revision Date: 11/09/2017



2.5x4.0mm Ceramic SMD Crystal C4BS

(former FX425B)

DATASHEET

• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel	G	H	I	J	K	L	M
∅1.5	4.0	4.0	5.5	12.0	1.3	1,000	2.0	∅ 13	∅ 21	∅ 80	∅ 180	13.5	2.0

Available Options & Part Identification for Automotive Crystal Model C4BS*

F C4BS B B M D 12.0

F	C4BS	B	B	M	D	12.0
FOX	Model Number	Tolerance B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM	Stability B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM L = 5 PPM	Load Capacitance B = 10 pF G = 12 pF U = 13 pF K = 16 pF L = 18 pF M = 20 pF R = 32 pF	Operating Temperature D = -10 ~ +60 °C F = -20 ~ =70 °C M = -40 ~ =85 °C	Frequency (MHz)

* Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.



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>.



© Copyright 2017 Fox Electronics. All rights reserved

Title / Description: C4BS SERIES STANDARD SPECIFICATIONS

Drawing Number: 101172

Size: A

Part Number:

Cage: 61429

Draftsperson: MK

Approved:

Revision Date: 11/09/2017