



# 2.5x4.0mm Ceramic SMD Crystal C4BS

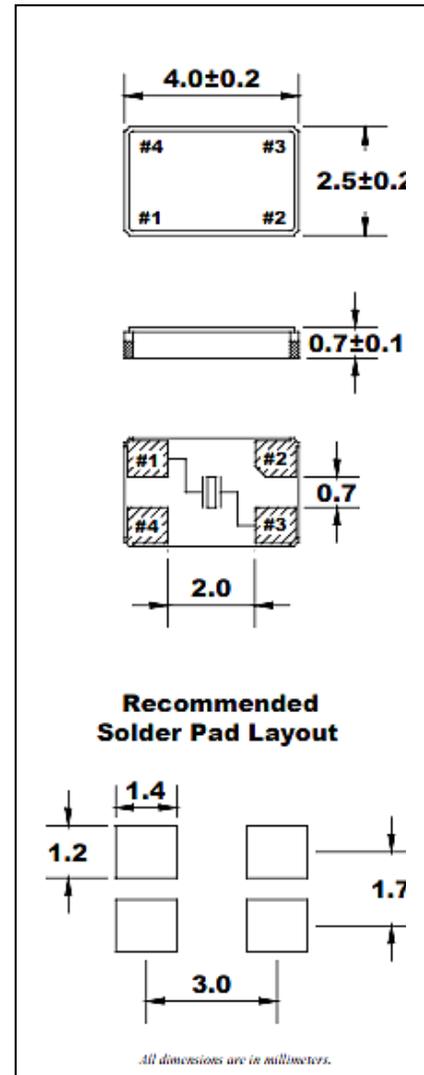
(former FX425B)

## DATASHEET

- Tolerances down to  $\pm 10$  PPM
- Stabilities down to  $\pm 5$  PPM
- Temperature Ranges as wide as  $-40^{\circ}\text{C}$  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)	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Shunt Capacitance (Co)	5 pF
Load Capacitance (Ci)	(See options on page 2)
Drive Level	0.1 mW
Aging per year	$\pm 5.0$ PPM
Maximum Soldering Temp / Time	$260^{\circ}\text{C} / 10$ 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 $\Omega$
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	$\pm 5$ PPM	$\pm 10$ PPM	$\pm 15$ PPM	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM
$-10^{\circ}\text{C}$ to $+60^{\circ}\text{C}$	O	O	O	O	O	O	O
$-20^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	X	O	O	O	O	O	O
$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	X	X	O	O	O	O	O

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

<p>© Copyright 2017 Fox Electronics, All rights reserved</p>	<b>Title / Description:</b> C4BS SERIES STANDARD SPECIFICATIONS		
	<b>Drawing Number:</b> 101172		<b>Size:</b> A
	<b>Part Number:</b>		<b>Cage:</b> 61429
	<b>Draftsperson:</b> MK	<b>Approved:</b> RB	<b>Revision Date:</b> 11/09/2017



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## DATASHEET

• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel	G	H	I	J	K	L	M
Ø1.5	4.0	4.0	5.5	12.0	1.3	1,000	2.0	Ø 13	Ø 21	Ø 80	Ø 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
<u>FOX</u>	<u>Model Number</u>	<u>Tolerance</u> B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM	<u>Stability</u> B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM L = 5 PPM	<u>Load Capacitance</u> B = 10 pF G = 12 pF U = 13 pF K = 16 pF L = 18 pF <b>M = 20 pF</b> R = 32 pF	<u>Operating Temperature</u> D = -10 ~ +60 °C F = -20 ~ =70 °C M = -40 ~ =85 °C	<u>Frequency (MHz)</u>

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



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