



# 2.0x1.6mm Ceramic SMD Crystal C1BS

(former FX216B)

## DATASHEET

- Tolerances down to 10 PPM
- Stabilities down to 10 PPM
- Temperature Ranges as wide as -40°C to +85°C

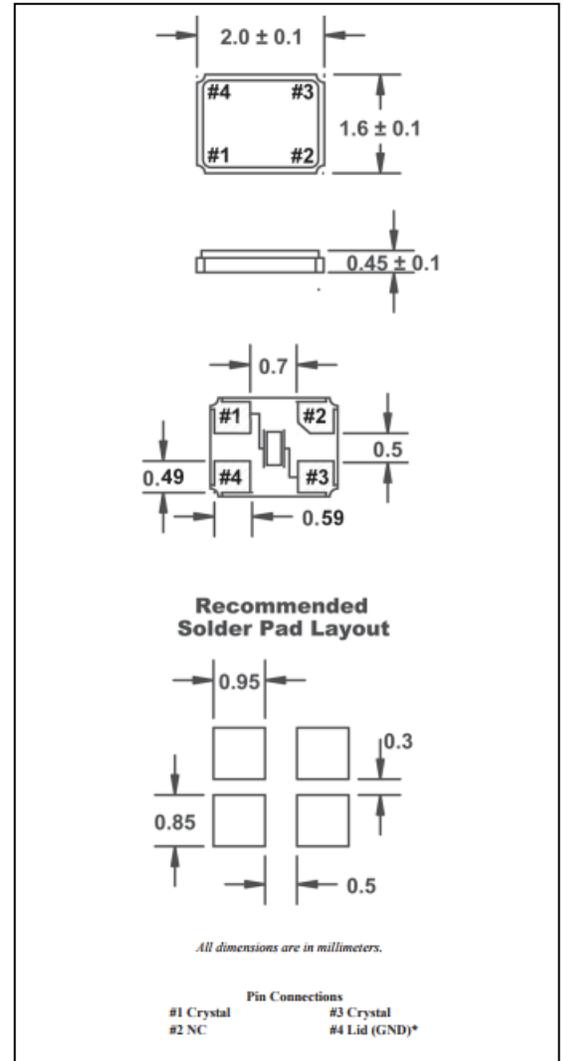
• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	16.000 ~ 64.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating (TOPR)	(See options below)
Storage (TSTG)	-55°C ~ +125°C
Shunt Capacitance (Co)	3 pF
Load Capacitance (C <sub>l</sub> )	(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
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
16.000 ~ 19.999999	Fundamental	200
20.000 ~ 23.999999	Fundamental	120
24.000 ~ 29.999999	Fundamental	100
30.000 ~ 39.999999	Fundamental	80
40.000 ~ 64.000	Fundamental	60

### • Available Operating Temperatures and Stabilities\*

Operating Temperature	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM
-10 ~ +60°C	O	O	O	O	O	O
-20 ~ +70°C	O	O	O	O	O	O
-40 ~ +85°C**	X	O	O	O	O	O

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



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.

<p>© Copyright 2017 Fox Electronics, All rights reserved</p>	<b>Title / Description:</b> C1BS SERIES STANDARD SPECIFICATIONS		
	<b>Drawing Number:</b> 101173		<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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• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel	G	H	I	J	K	L	M
∅1.55	4.0	4.0	3.5	8.0	0.65	3,000	2.0	∅13.0	21.0	60.0	180.0	9.0	2.0

## Available Options & Part Identification for Crystal Model C1BS\*

### F C1BS E E E M 32.0

F	C1BS	E	E	E	M	32.0
<u>FOX</u>	<u>Model Number</u>	<u>Tolerance</u> B = 50 PPM C = 30 PPM D = 25 PPM <b>E = 20 PPM</b> F = 15 PPM H = 10 PPM	<u>Stability</u> B = 50 PPM C = 30 PPM D = 25 PPM <b>E = 20 PPM</b> F = 15 PPM H = 10 PPM	<u>Load Capacitance</u> D = 8 pF <b>E = 10 pF</b> G = 12 pF J = 15 pF L = 18 pF M = 20 pF V = 7 pF W = 9 pF	<u>Operating Temperature</u> D = -10 ~ +60 °C F = -20 ~ +70 °C <b>M = -40 ~ +85 °C</b>	<u>Frequency (MHz)</u>

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



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