



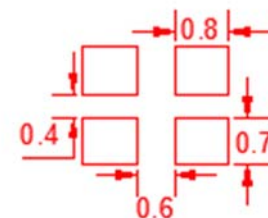
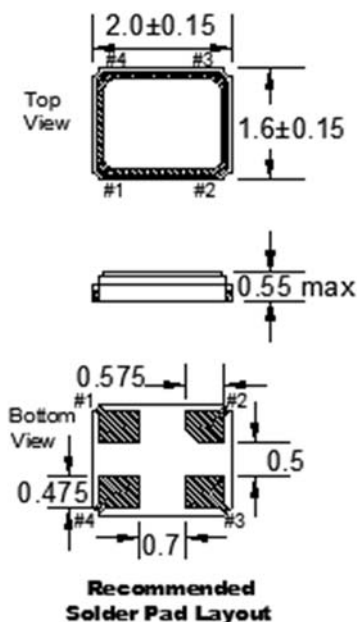
2.0 x 1.6mm Auto Grade Crystal

C1BA
(former FXA2016B)
DATASHEET

- AEC Q200 Qualified
- IATF-16949 QMS
- Tolerances down to ± 10 PPM
- Stabilities down to ± 20 PPM

• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	16.000 ~ 54.000 MHz
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 ~ +150°C
Shunt Capacitance (C ₀)	3pF
Load Capacitance (C _L)	(See options on page 2)
Drive Level	100µW
Aging per year	± 5 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
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
16.000 ~ 19.199999	Fundamental	200
19.200 ~ 25.999999	Fundamental	100
26.000 ~ 35.999999	Fundamental	80
36.000 ~ 54.000	Fundamental	60



Dimensions are in millimeters.

Pin Connections

#1 Crystal #3 Crystal
#2 Lid/Gnd #4 Lid/Gnd

Note: Dimensional drawing is for reference to critical specifications defined by size measurements.

•Available Operating Temperatures and Stabilities

Operating Temperature	± 20 PPM	± 25 PPM	± 30 PPM	± 50 PPM	± 100 PPM
-40 ~ +85°C	O	O	O	O	O
-40 ~ +105°C	X	X	O	O	O
-40 ~ +125°C	X	X	X	O	O
-55 ~ +125°C	X	X	X	O	O

Key: O=Available, X=Not Available,
¹Does not imply stocked part.

Reference / Comments	Title / Description: C1BA SERIES STANDARD SPECIFICATIONS		
<p>© Copyright 2019 Fox Electronics. All rights reserved</p>	Drawing Number: C1BA-DOC-2		Size: A
	Part Number:		Cage: 61429
	Draftsperson: BEC		Approved: MAJ
			Date: 06/06/2019



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• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	Reel QTY	G	H	I	J	K	L	M
∅1.55	4.0	4.0	3.5	8.0	0.65	-T3 = 3,000 -T2 = 2,000 -T1 = 1,000	2.5	∅13	∅21	∅60	∅180	9.0	2.0

Available Options & Part Identification for Automotive Crystal Model C1BA¹

F C1BA B C V I 40.0

F	C1BA	B	C	V	I	40.0
FOX	Model Number	Tolerance	Stability	Load Capacitance ²	Operating Temperature	Frequency (MHz)
		B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	A = ±100 PPM B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM	V=7pF D=8pF E=10pF G=12pF J=15pF K=16pF L=18pF M=20pF	M = -40 to +85°C P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C	

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

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



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For datasheet type definitions and a glossary of common terms, visit <http://www.foxonline.com/tgcrystals.html>.

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