



# 5.0 x 3.2mm Auto Grade Crystal C5BA

(former FXA5032B)

## DATASHEET

AEC Q200 Qualified  
 TS-16949 QMS  
 Tolerances down to  $\pm 10$  PPM  
 Stabilities down to  $\pm 20$  PPM  
 Temperature Ranges as wide as  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

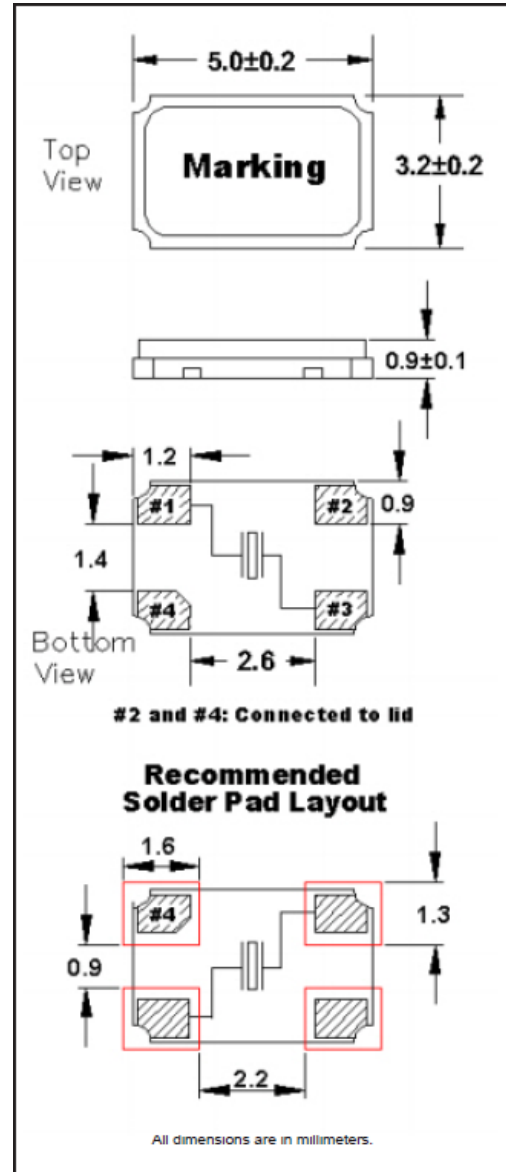
• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	8.0 ~ 52.0 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating ( $T_{OPR}$ )	See options below
Storage ( $T_{STG}$ )	$-55^{\circ}\text{C} \sim +150^{\circ}\text{C}$
Shunt Capacitance ( $C_0$ )	5 pF
Load Capacitance ( $C_L$ )	(See options on page 2)
Drive Level	100 $\mu\text{W}$
Aging per year	$\pm 5$ PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS / REACH Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR $\Omega$
8.0 ~ 10.0	Fundamental	150
>10.0 ~ 12.0	Fundamental	90
>12.0 ~ 15.0	Fundamental	70
>15.0 ~ 52.0	Fundamental	50

### • Available Operating Temperatures and Stabilities<sup>1</sup>

Operating Temperature	$\pm 20$ PPM	$\pm 30$ PPM	$\pm 50$ PPM	$\pm 100$ PPM
$-40 \sim +85^{\circ}\text{C}$	O	O	O	O
$-40 \sim +105^{\circ}\text{C}$	X	O	O	O
$-40 \sim +125^{\circ}\text{C}^{\Delta}$	X	X	O	O

Key: O=Available, X=Not Available,  $\Delta$ =Consult Fox Technical Support  
<sup>1</sup>Does not imply attocked 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.

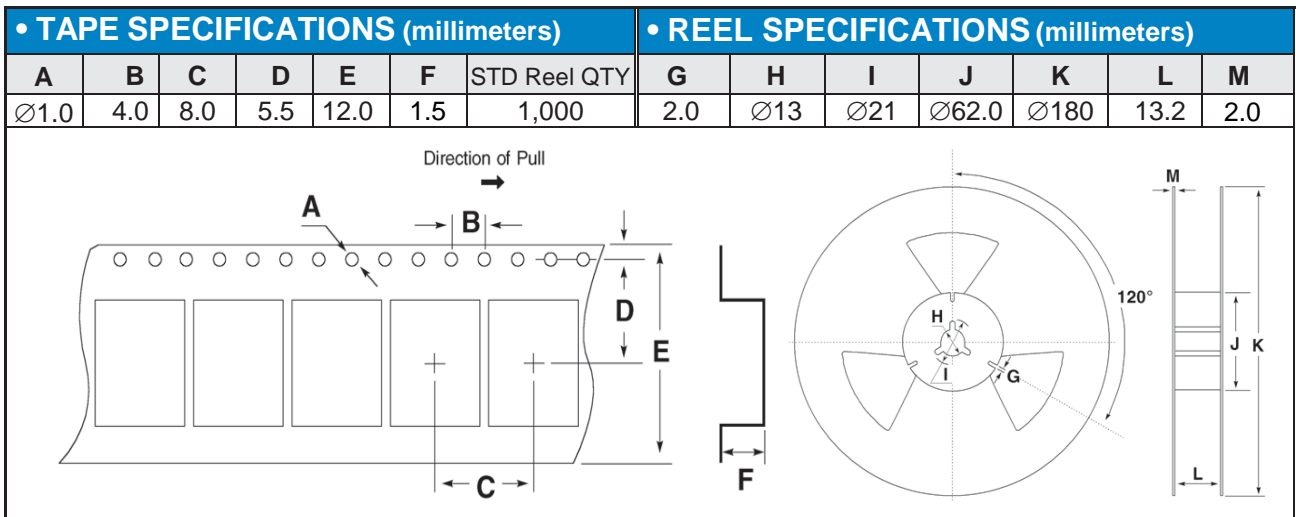
Reference / Comments	Title / Description: C5BA SERIES STANDARD SPECIFICATIONS		
 © Copyright 2017 Fox Electronics. All rights reserved	Drawing Number:		Size: A
	Part Number:		Cage: 61429
	Draftsperson: CMR		Approved: BEC



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### Available Options & Part Identification for Automotive Crystal Model C5BA\*

#### F C5BA C B M I 40.0

F	C5BA	C	B	M	I	40.0
FOX	Model Number	<b>Tolerance</b> <u>B=50ppm</u> <u>C=30ppm</u> <u>E=20ppm</u> <u>H=10ppm</u>	<b>Stability</b> <u>A=100ppm</u> <u>B=50ppm</u> <u>C=30ppm</u> <u>E=20ppm</u>	<b>Load Capacitance</b> <u>A=Series</u> <u>V=7pF</u> <u>D=8pF</u> <u>E=10pF</u> <u>G=12pF</u> <u>J=15pF</u> <u>K=16pF</u> <u>L=18pF</u> <u>M=20pF</u>	<b>Operating Temperature</b> <u>M=-40~+85°C</u> <u>P=-40~+105°C</u> <u>I=-40~+125°C</u>	Frequency (MHz)

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



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**Reference / Comments**

**Title / Description: C5BA SERIES STANDARD SPECIFICATIONS**



<b>Drawing Number:</b>		<b>Size: A</b>
<b>Part Number:</b>		<b>Cage: 61429</b>
<b>Draftsperson: CMR</b>	<b>Approved: BEC</b>	<b>Date: 01/03/2018</b>