

Features

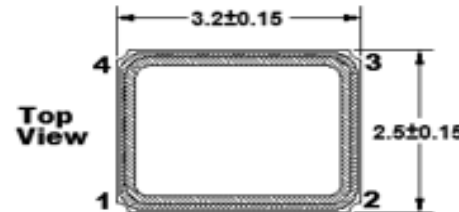
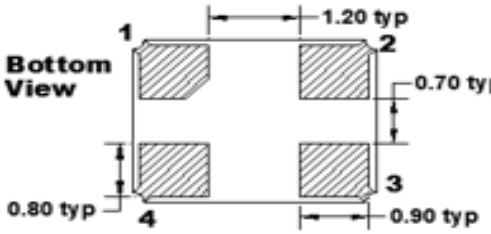
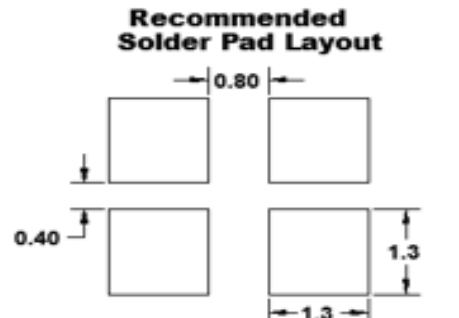
- AEC Q200 Qualified
- IATF-16949 QMS
- Tolerances down to ± 10 PPM
- Stabilities down to ± 20 PPM

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	8.000 ~ 150.000 MHz
Frequency Tolerance @ 25°C	(See options below)
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)	3 pF
Load Capacitance (C_L)	(See options below)
Drive Level	100 μ W
Aging per year (@ 25°C)	± 5 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL) per J-STD-033	N/A
Termination Finish	Au (0.3~1 μ m) over Ni (1.27~8.89 μ m)
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant (latest version)	Yes

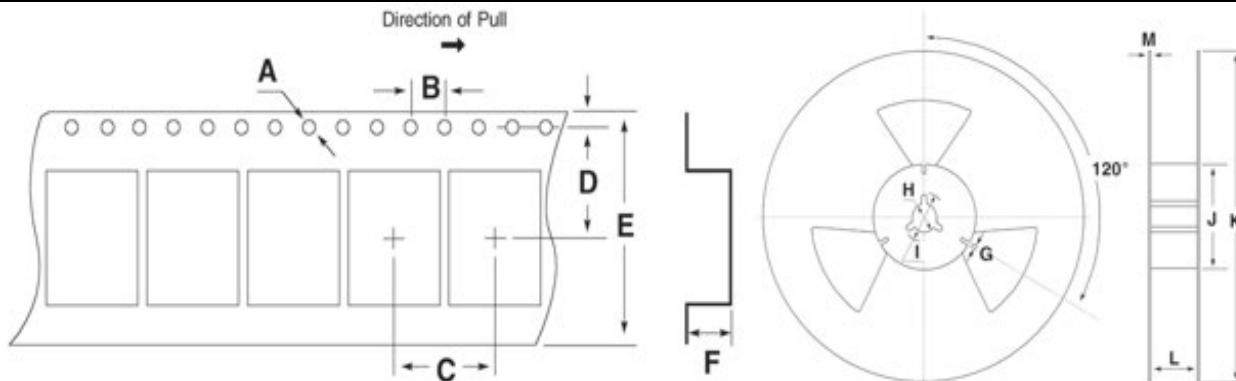
Frequency Range (MHz)	Operating Mode	Max ESR Ω
8.000 ~ 9.999999	Fundamental	500
10.000 ~ 11.999999	Fundamental	150
12.000 ~ 15.999999	Fundamental	80
16.000 ~ 19.999999	Fundamental	60
20.000 ~ 24.999999	Fundamental	50
25.000 ~ 53.999999	Fundamental	40
54.000 ~ 64.000	Fundamental	30
54.000 ~ 99.999999	3 RD OT	150
100.000 ~ 124.999999	3 RD OT	100
125.000 ~ 150.000	3 RD OT	80

AVAILABLE OPERATING TEMPERATURES AND STABILITIES ¹					
Operating Temperature	± 20 PPM	± 25 PPM	± 30 PPM	± 50 PPM	± 100 PPM
-40°C ~ +85°C	O	O	O	O	O
-40°C ~ +105°C	X	X	O	O	O
-40°C ~ +125°C	X	X	X	O	O
-55°C ~ +125°C	X	X	X	O	O

Key: O = Available, X = Not Available,

DIMENSIONS / MECHANICAL SPECIFICATIONS	
 Top View	
 Side View	
 Bottom View	
 Recommended Solder Pad Layout	
Dimensions in mm Pin Connections #1 - Crystal #2 - Lid/Gnd #3 - Crystal #4 - Lid/Gnd	
Note: Dimensional drawing is for reference to critical specifications defined by size measurements.	

TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	4.0	3.5	8.0	1.4	-T3 = 3,000 -T2 = 2,000 -T1 = 1,000	2.5	ø13	ø21	ø60	ø180	9.0	2.0



Available Options & Part Identification for Automotive Crystal Model C3BA¹

Sample PN: **FC3BABCVI40.0**

F	C3BA	B	C	V	I	40.0	-T1
<u>Fox</u>	<u>Model Number</u>	<u>Tolerance</u>	<u>Stability</u>	<u>Load Capacitance</u> ²	<u>Operating Temperature</u>	<u>Frequency (MHz)</u>	<u>Values Added Options</u>
		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		Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs T3 = 3,000 pcs

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

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

Reliability Test Conditions

Please contact Abracon Quality Assurance department

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[ABRACON:](#)

[FC3BACCGM20.0-T3](#) [FC3BACALI16.0-T3](#) [FC3BACBDI16.0-T3](#) [FC3BAEBDI12.0-T1](#) [FC3BAEBDI16.0-T1](#)
[FC3BAEBDI20.0-T1](#) [FC3BAEBDI24.0-T1](#) [FC3BAEBDI25.0-T1](#) [FC3BAEBDI40.0-T1](#) [FC3BAEBDI8.0-T1](#)
[FC3BAEBGI12.0-T1](#) [FC3BAEBGI24.0-T1](#) [FC3BAEBGI25.0-T1](#) [FC3BAEBGI40.0-T1](#)