FC5BA

(Former FXA5032B)

5mm x 3.2mm
Auto Grade Crystal

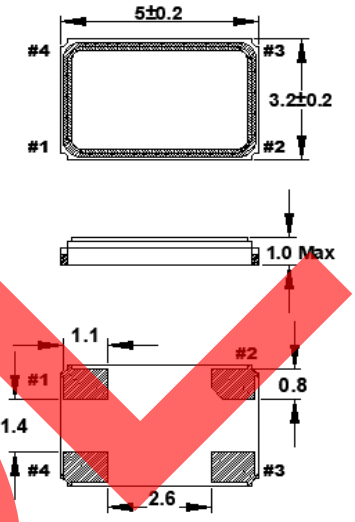
Features

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

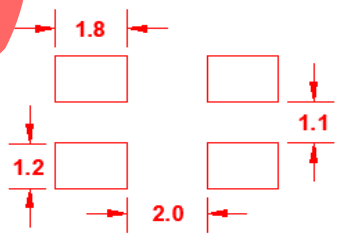
STANDARD SPECIFICATIONS	
PARAMETERS	**MAX (Unless otherwise noted)**
Frequency Range	8.000 ~ 133.000 MHz
Frequency Tolerance @ 25°C	(See options below)
Frequency Stability, ref 25°C	(See options below)
Temperature Range Operating (T_{OPR}) Storage (T_{STG})	 (See options below) -55°C ~ +150°C
Shunt Capacitance (C_O)	7 pF
Load Capacitance (C_L)	(See options below)
Drive Level	100µW
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 (0.3~1µm) over Ni (1.27~8.89µm)
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 ~ 9.749999	Fundamental	70
9.750 ~ 9.999999	Fundamental	60
10.000 ~ 11.999999	Fundamental	45
12.000 ~ 15.999999	Fundamental	35
16.000 ~ 19.999999	Fundamental	30
20.000 ~ 49.999999	Fundamental	25
50.000 ~ 54.000	Fundamental	20
40.000 ~ 79.999999	3RD OT	100
80.000 ~ 99.999999	3RD OT	80
100.000 ~ 133.000	3RD OT	60

DIMENSIONS / MECHANICAL SPECIFICATIONS



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.

AVAILABLE OPERATING TEMPERATURES AND STABILITIES					
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					

NOT FOR NEW DESIGN

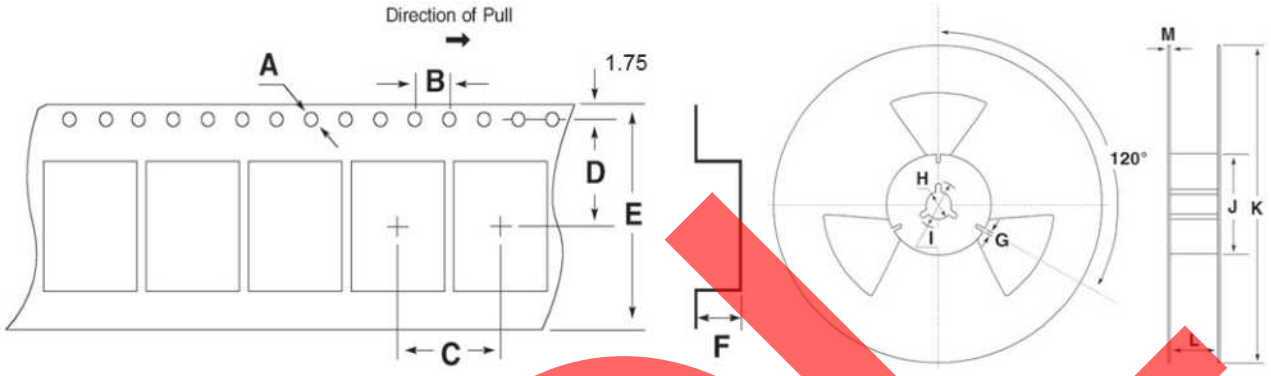
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TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	8.0	5.5	12.0	1.4	-T1 = 1,000	2.0	Ø13	Ø21	Ø62	Ø180	13.5	2.0



Available Options & Part Identification for Automotive Crystal Model C5BA[1]

Sample PN: FC5BABCVI40.0-T1

F	C5BA	B	C	V	I	40.0	-T1
Fox	**Model Number**	**Tolerance** **B = ±50 PPM** C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	**Stability** A = ±100 PPM B = ±50 PPM **C = ±30 PPM** D = ±25 PPM E = ±20 PPM	**Load Capacitance[2]** **V = 7pF** D = 8pF E = 10pF G = 12pF J = 15pF K = 16pF L = 18pF M = 20pF	**Operating Temperature** M = -40 to +85°C P = -40 to +105°C **I = -40 to +125°C** T = -55 to +125°C	**Frequency (MHz)**	**Values Added Options** Blank = Bulk T1 = 1,000 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

EOL