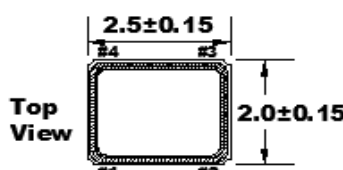
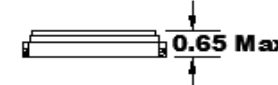
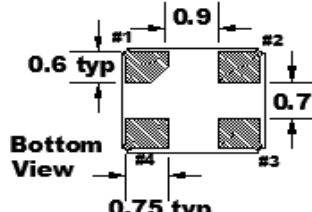
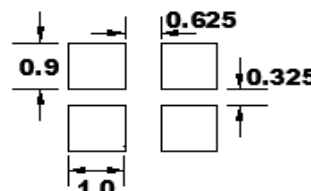


Features

- 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	12.000 ~ 54.000 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 ~ +105°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
12.000 ~ 13.999999	Fundamental	200
14.000 ~ 15.999999	Fundamental	150
16.000 ~ 19.999999	Fundamental	90
20.000 ~ 23.999999	Fundamental	70
24.000 ~ 24.999999	Fundamental	60
25.000 ~ 44.999999	Fundamental	50
45.000 ~ 54.000	Fundamental	40

DIMENSIONS / MECHANICAL SPECIFICATIONS	
 Top View	
 Side View	
 Bottom View	
Recommended Solder Pad Layout 	
Dimensions 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					

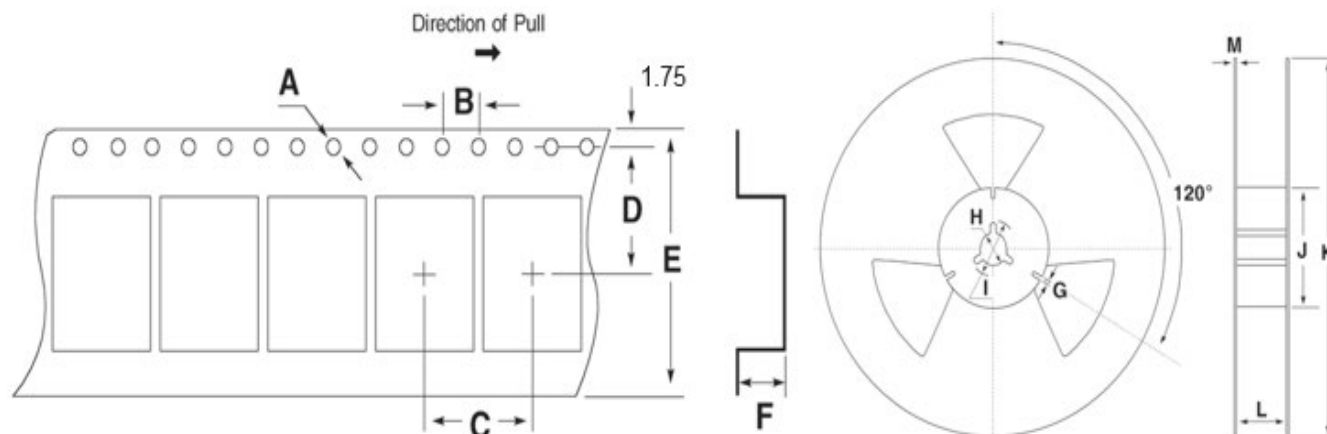
FC2BA

(Former FXA2520B)

2.5mm x 2.0mm
Auto Grade Crystal



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	0.8	-T3 = 3,000 -T2 = 2,000 -T1 = 1,000	2.5	ø13	ø21	ø60	ø180	9.0	2.0



Available Options & Part Identification for SMD Crystal C2BA¹

Sample PN: **FC2BABCVI40.0-T3**

F	C2BA	B	C	V	I	40.0	-T3
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 Capacitance² 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 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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON:

[FC2BACBEI16.0](#) [FC2BABAAI50.0-T3](#) [FC2BABAJP25.0-T3](#) [FC2BABAJM20.0-T3](#) [FC2BABBBGM16.0-T3](#)
[FC2BACBEI16.0-T3](#) [FC2BAEBEM27.0-1-T3](#) [FC2BAEEDP48.0-1-T3](#) [FC2BAFCEP25.0-1-T3](#)