5.0mm x 3.2mm Ceramic SMD Crystal

C5BS
(Former FX532B)
DATASHEET

- Tolerances down to 10 PPM
- Stabilities down to 5 PPM
- Temperature Ranges as wide as -55ºC to +125ºC

C5BS STANDARD SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	8.000 ~ 200.000 MHz
Frequency Tolerance @ 25ºC	(See options on page 2)
Frequency Stability, ref @ 25ºC	(See options below)
Temperature Range Operating (T_{OPR}) Storage (T_{STG})	 (See options below) -55ºC ~ +125ºC
Shunt Capacitance (C_0)	5.0 pF
Load Capacitance (C_L)	(See options on page 2)
Drive Level	0.1 mW
Aging per year	±5 PPM
Maximum Soldering Temp / Time	260ºC / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS/REACH Compliant	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 ~ 200.000	Fundamental	20
40.000 ~ 79.999999	3RD OT	100
80.000 ~ 99.999999	3RD OT	80
100.000 ~ 133.000	3RD OT	60

Available Operating Temperatures and Stabilities*								
Operating Temperature	±5PPM	±10PPM	±15PPM	±20PPM	±25PPM	±30PPM	±50PPM	±50PPM
0 ~ 70ºC	X	O	O	O	O	O	O	N/A
-10 ~+60ºC	O	O	O	O	O	O	O	N/A
-10 ~+70ºC	X	O	O	O	O	O	O	N/A
-20 ~+70ºC	X	O	O	O	O	O	O	N/A
-30 ~+85ºC	X	X	O	O	O	O	O	N/A
-40 ~+85ºC	X	X	O	O	O	O	O	N/A
-40 ~+105ºC	X	X	X	X	X	X	O	O
-40 ~+125ºC	X	X	X	X	X	X	O	O
-55 ~+125ºC	X	X	X	X	X	X	O	O

Key: O=Available, X=Not Available, n/a=Not applicable
*Does not imply a stocked part.

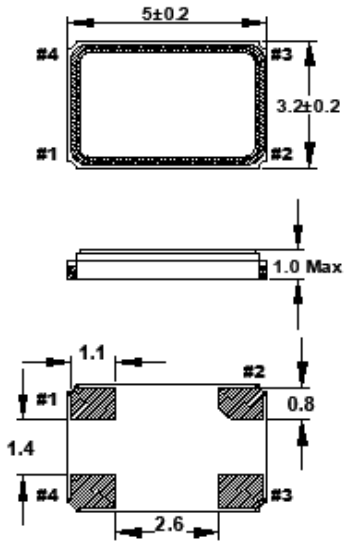
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Title/Description: C5BS Series Standard Specifications		
Drawing Number: C5BS-DOC-2		**Size:** A
Part Number:		**Cage:** 61429
Draftsperson: MAJ	**Approved**: BEC	**Revision Date:** 06/04/2019

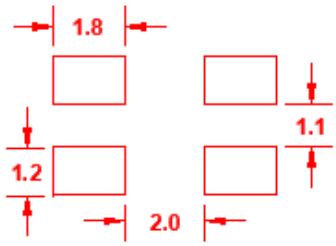
5.0mm x 3.2mm Ceramic SMD Crystal

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DIMENSIONS (mm)



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. Certain non-critical visual attributes, such as side castellations, etc. may vary.

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5.0mm x 3.2mm Ceramic SMD Crystal

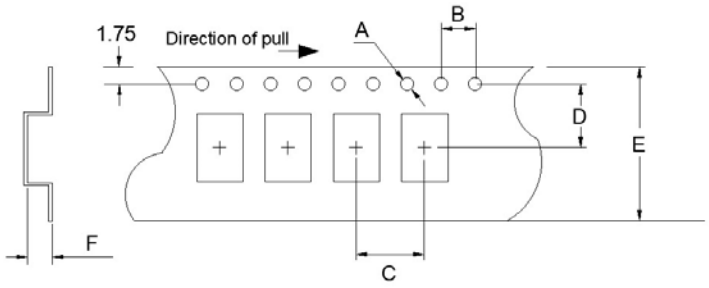
C5BS

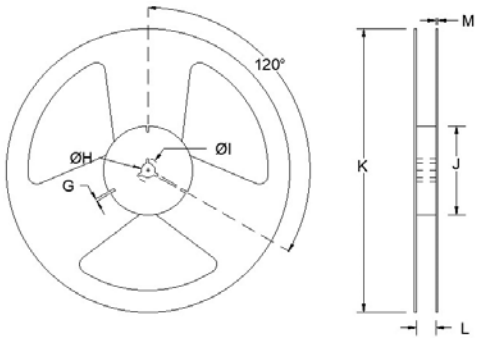
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DATASHEET

TAPE SPECIFICATIONS (mm)						
A	**B**	**C**	**D**	**E**	**F**	**Reel Qty**
Ø1.55	4.0	8.0	5.5	12.0	1.4	-T1=1,000

REEL SPECIFICATIONS (mm)						
G	**H**	**I**	**J**	**K**	**L**	**M**
2.0	Ø13	Ø21	Ø80	Ø178	13.5	2.0





AVAILABLE OPTIONS & PART IDENTIFICATION[1]

Example: F C5BS C C E M 25.0

F	C5BS	C	C	E	M	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 F = ±15 PPM H = ±10 PPM L = ±5 PPM	**E=10pF** G=12pF J=15pF K=16pF L=18pF M=20pF	C = 0 to +70ºC D = -10 to +60ºC E = -10 to +70ºC F = -20 to +70ºC K = -30 to +85ºC **M = -40 to +85ºC** P = -40 to +105ºC I = -40 to +125ºC T = -55 to +125ºC	

[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 Fox Technical Support for assistance

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