



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 -55°C to +125°C

C5BS STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	8.000 ~ 200.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range Operating (T _{OPR}) Storage (T _{STG})	(See options below) -55°C ~ +125°C
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	260°C / 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	3 RD OT	100
80.000 ~ 99.999999	3 RD OT	80
100.000 ~ 133.000	3 RD OT	60

Available Operating Temperatures and Stabilities*

Operating Temperature	±5PPM	±10PPM	±15PPM	±20PPM	±25PPM	±30PPM	±50PPM	±50PPM
0 ~ 70°C	X	O	O	O	O	O	O	N/A
-10 ~ +60°C	O	O	O	O	O	O	O	N/A
-10 ~ +70°C	X	O	O	O	O	O	O	N/A
-20 ~ +70°C	X	O	O	O	O	O	O	N/A
-30 ~ +85°C	X	X	O	O	O	O	O	N/A
-40 ~ +85°C	X	X	O	O	O	O	O	N/A
-40 ~ +105°C	X	X	X	X	X	X	O	O
-40 ~ +125°C	X	X	X	X	X	X	O	O
-55 ~ +125°C	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

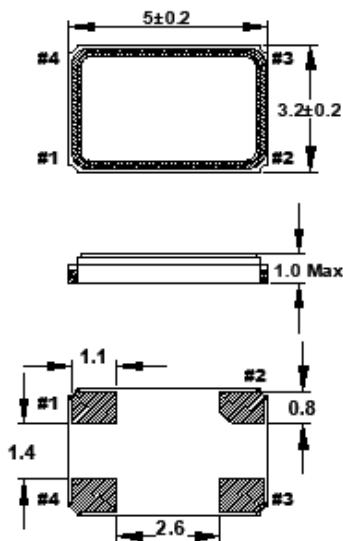
Revision Date: 06/04/2019



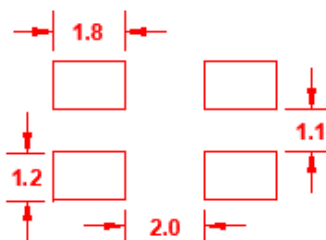
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DIMENSIONS (mm)



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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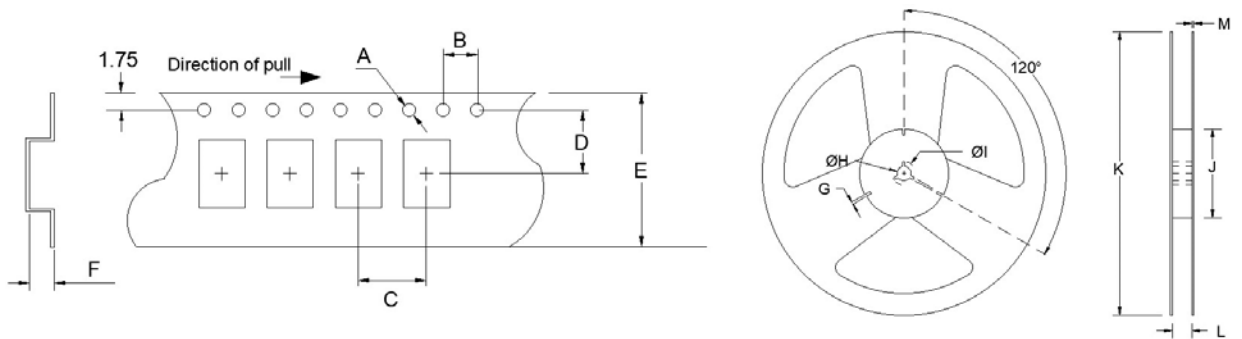


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TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	Reel Qty	G	H	I	J	K	L	M
Ø1.55	4.0	8.0	5.5	12.0	1.4	-T1=1,000	2.0	Ø13	Ø21	Ø80	Ø178	13.5	2.0



AVAILABLE OPTIONS & PART IDENTIFICATION¹

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 +70°C D = -10 to +60°C E = -10 to +70°C F = -20 to +70°C K = -30 to +85°C M = -40 to +85°C P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C	

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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