

## 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 SF	PECIFICATIONS			
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 (Topr)	(See options below)			
Storage (T <sub>STG</sub> )	-55°C ~ +125°C			
Shunt Capacitance (C <sub>0</sub> )	5.0 pF			
Load Capacitance (C <sub>L</sub> )	(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 <sup>RD</sup> OT	100
80.000 ~ 99.999999	3 <sup>RD</sup> OT	80
100.000 ~ 133.000	3 <sup>RD</sup> OT	60

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

Key: O=Available, X=Not Available, n/a=Not applicable

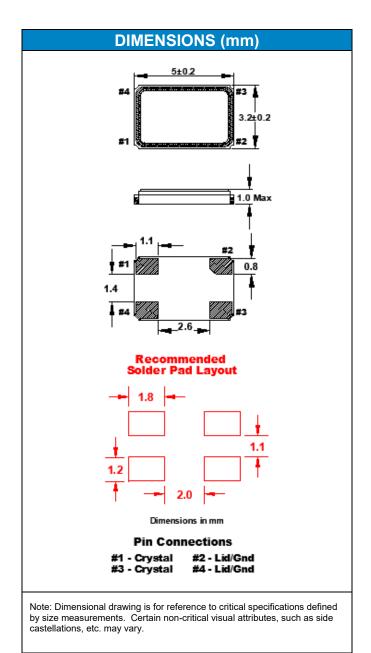
<sup>\*</sup>Does not imply a stocked part.

	Title/Description: C5BS Series Standard Specifications				
	Drawing Number: C5BS	S-DOC-2	Size: A		
<b>F©</b> X	Part Number:		Cage: 61429		
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TAPE SPECIFICATIONS (mm)					1		RE	L SPE	CIFIC	ATIONS	(mm)			
Α	В	С	D	E	F	Reel Qty		G	Н		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
	1.'	75 Dir	rection of p		A O Q	B D D			ØH G		91	20°	K	- М

	AVAILABLE OPTIONS & PART IDENTIFICATION <sup>1</sup> Example: <u>F C5BS C C E M</u> 25.0									
F	C5BS	С	С	E	M	40.0				
Fox	Model Number	Tolerance	Stability	Load Capacitance <sup>2</sup>	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					

<sup>&</sup>lt;sup>1</sup> Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

<sup>&</sup>lt;sup>2</sup> Listed load capacitances represent the most commonly used. Other load capacitances are available. Contact Fox Technical Support for assistance



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