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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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7.5x5mm Ceramic SMD Crystal

C7BS

(former FD)

DATASHEET

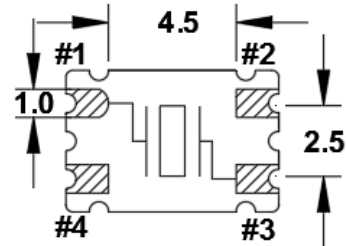
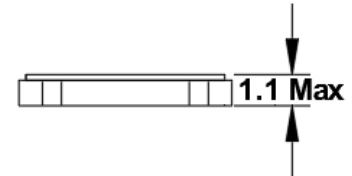
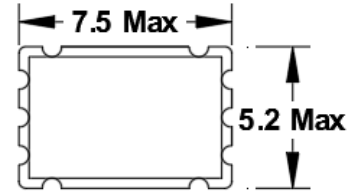
Tolerances down to ± 10 PPM

Stabilities down to ± 5 PPM

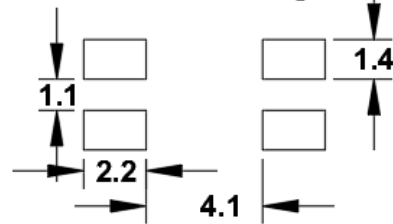
Operating Temperature Range to $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Fundamental (Inverted Mesa) 50-218 MHz

• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (F_0)	6.000 ~ 218.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating (T_{OPR})	(See options below)
Storage (T_{STG})	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Shunt Capacitance (C_0)	5 pF
Load Capacitance (C_L)	(See options on page 2)
Drive Level	
6.000 ~ 160.000 MHz (Fund to 50MHz, 3rd OT, 5th OT)	0.5 mW
50.000 ~ 218 MHz (Fund Inverted Mesa)	0.1 mW
Aging per year	± 5 PPM
Maximum Soldering Temp / Time	$260^{\circ}\text{C} / 10$ Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au
Seal Method	Seam Seal
Lead (Pb) Free	Yes
RoHS Compliant	Yes



Recommended Solder Pad Layout



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.

Frequency Range (MHz)	Operating Mode	Max ESR Ω
6.000 ~ 10.000	Fundamental	110
10.000001 ~ 16.000	Fundamental	60
16.000001 ~ 50.000	Fundamental	40
50.000001 ~ 218.000	Fundamental (Inv. Mesa)	30
28.000 ~ 176.000	3 rd OT	60
84.000 ~ 200.000	5 th OT	80

•Standard Operating Temperatures and Stabilities

Operating Temperature	± 5 PPM	± 10 PPM	± 15 PPM	± 20 PPM	± 25 PPM	± 30 PPM	± 50 PPM
$-10 \sim +60^{\circ}\text{C}$	O	O	O	O	O	O	O
$-20 \sim +70^{\circ}\text{C}$	Δ	O	O	O	O	O	O
$-40 \sim +85^{\circ}\text{C}^{**}$	X	X	O	O	O	O	O

Key: O=Available, X=Not Available, Δ =Consult Fox Technical Support



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Title / Description: C7BS SERIES STANDARD SPECIFICATIONS	
Drawing Number: 100876	Size: A
Part Number:	Cage: 61429
Draftsperson: CMR	Approved: SM
	Revision Date: 01/12/2017



7.5x5mm Ceramic SMD Crystal C7BS

(former FD)

DATASHEET

• TAPE SPECIFICATIONS (millimeters)								• REEL SPECIFICATIONS (millimeters)							
MODEL	A	B	C	D	E	F	STD Reel QTY	MODEL	G	H	I	J	K	L	M
C7BS	∅1.5	4.0	8.0	7.5	16.	1.7	1,000	C7BS	2.0	∅13	∅21	∅80	∅250	17.5	2.0

Available Options & Part Identification for Automotive Crystal Model C7BS

F C7BS B B M D 25.0

F	C7BS	B	B	M	D	25.0
<u>FOX</u>	<u>Model Number</u>	<u>Tolerance</u> B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM	<u>Stability</u> B = 50 PPM C = 30 PPM D = 25 PPM E = 20 PPM F = 15 PPM H = 10 PPM L = 5 PPM	<u>Load Capacitance</u> A = Series E = 10 pF G = 12 pF J = 15 pF K = 16 pF L = 18 pF M = 20 pF N = 20 pF	<u>Operating Temperature</u> D = -10 ~ +60°C F = -20 ~ +70°C M = -40 ~ +85°C	<u>Frequency (MHz)</u>

*Other tolerances, stabilities, & operating temperatures available. Consult Fox Customer Service for specific requirements.



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