FC7BS

(Former FD)

7mm x 5mm
Ceramic SMD Crystal

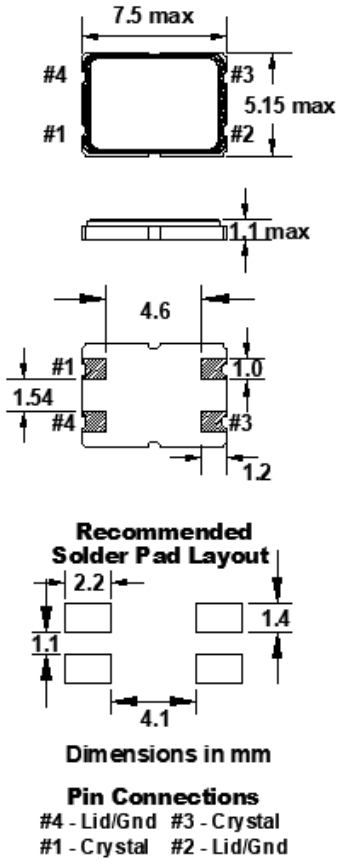
Features

- Tolerances down to ±10 PPM
- Stabilities down to ±5 PPM
- Operating Temperature Range to –55°C ~ +125°C
- Fundamental (Inverted Mesa) > 50 MHz

STANDARD SPECIFICATIONS	
PARAMETERS	**MAX (Unless otherwise noted)**
Frequency Range	6.000 ~ 312.000 MHz
Frequency Tolerance @ 25°C	(See options below)
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_O)	5 pF
Load Capacitance (C_L)	(See options below)
Drive Level 6.000 ~ 100.000 MHz (Fund to 50MHz, 3rd OT, 5th OT) >50.000 ~ 312 MHz (Fund Inverted Mesa)	0.5 mW 100µW
Aging per year (@ 25°C)	±3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL) per J-STD-033	Not Applicable
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
6.000 ~ 9.999999	Fundamental	80
10.000 ~ 15.999999	Fundamental	50
16.000 ~ 31.999999	Fundamental	40
32.000 ~ 39.999999	Fundamental	30
40.000 ~ 312.000	Fundamental	20
28.000 ~ 84.000	3RD OT	70
84.000 ~ 100.000	5TH OT	80

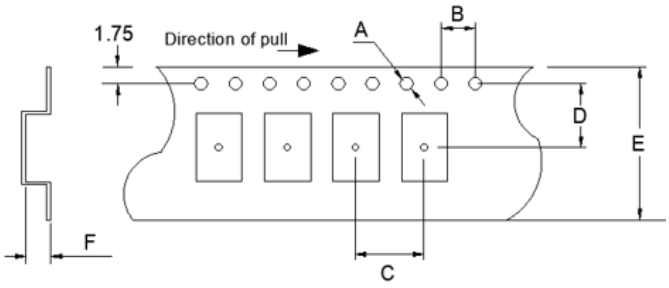
DIMENSIONS / MECHANICAL SPECIFICATIONS



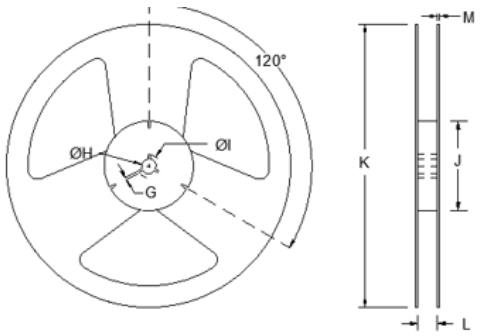
Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary. Cut corner/rounded pad not shown. Crystal has no polarity and cannot be placed incorrectly; pin numbers are for reference only.

AVAILABLE OPERATING TEMPERATURES AND STABILITIES*								
Operating Temperature	**±5 PPM**	**±10 PPM**	**±15 PPM**	**±20 PPM**	**±25 PPM**	**±30 PPM**	**±50 PPM**	**±100 PPM**
-0°C ~ +70°C	X	O	O	O	O	O	O	N/A
-10°C ~ +60°C	O	O	O	O	O	O	O	N/A
-10°C ~ +70°C	X	O	O	O	O	O	O	N/A
-20°C ~ +70°C	X	O	O	O	O	O	O	N/A
-30°C ~ +85°C	X	X	O	O	O	O	O	N/A
-40°C ~ +85°C	X	X	O	O	O	O	O	N/A
-40°C ~ +105°C	X	X	X	X	X	X	O	O
-40°C ~ +125°C	X	X	X	X	X	X	O	O
-55°C ~ +155°C	X	X	X	X	X	X	O	O
Key: O = Available, X = Not Available, N/A = Not Applicable								

TAPE SPECIFICATIONS (mm)						
A	**B**	**C**	**D**	**E**	**F**	**REEL QTY**
ø1.55	4.0	8.0	7.5	16.0	1.7	-T1 = 1,000 -T2 = 2,000



REEL SPECIFICATIONS (mm)						
G	**H**	**I**	**J**	**K**	**L**	**M**
2.0	Ø13	Ø21	Ø80	Ø250	17.5	2.0



Available Options & Part Identification for Crystal Model C7BS[1] Sample PN: **FC7BSBBMD25.0-T1**							
F	**C7BS**	**B**	**B**	**M**	**D**	**25.0**	**-T1**
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 F = ±15 PPM H = ±10 PPM L = ±5 PPM	**Load Capacitance[2]** E = 10pF G = 12pF J = 15pF K = 16pF L = 18pF **M = 20pF**	**Operating Temperature** 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	**Frequency (MHz)**	**Values Added Options** Blank = Bulk T1 = 1,000 pcs T2 = 2,000 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