

### Features

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

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	7.3728 ~ 133.000 MHz
Frequency Tolerance @ 25°C	(See options below)
Frequency Stability, ref 25°C	(See options below)
Temperature Range	
Operating (T <sub>OPR</sub> )	(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 below)
Drive Level	100µW
Aging per year (@ 25°C)	±5 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL) per J-STD-033	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
7.3728 ~ 7.999999	Fundamental	100
8.000 ~ 9.999999	Fundamental	70
10.000 ~ 11.999999	Fundamental	50
12.000 ~ 19.999999	Fundamental	30
20.000 ~ 24.999999	Fundamental	25
25.000 ~ 200.000	Fundamental	20
40.000 ~ 51.999999	3 <sup>RD</sup> OT	100
52.000 ~ 71.999999	3 <sup>RD</sup> OT	80
72.000 ~ 133.000	3 <sup>RD</sup> OT	70

DIMENSIONS / MECHANICAL SPECIFICATIONS	
<p><b>Pad Connections</b></p> <p>#1 - Crystal    #2- Lid/Gnd #3 - Crystal    #4- Lid/Gnd</p>	
<p><b>Recommended Solder Pad Layout</b></p> <p>Dimensions in mm</p>	
<p>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.</p>	

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 ~ +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.

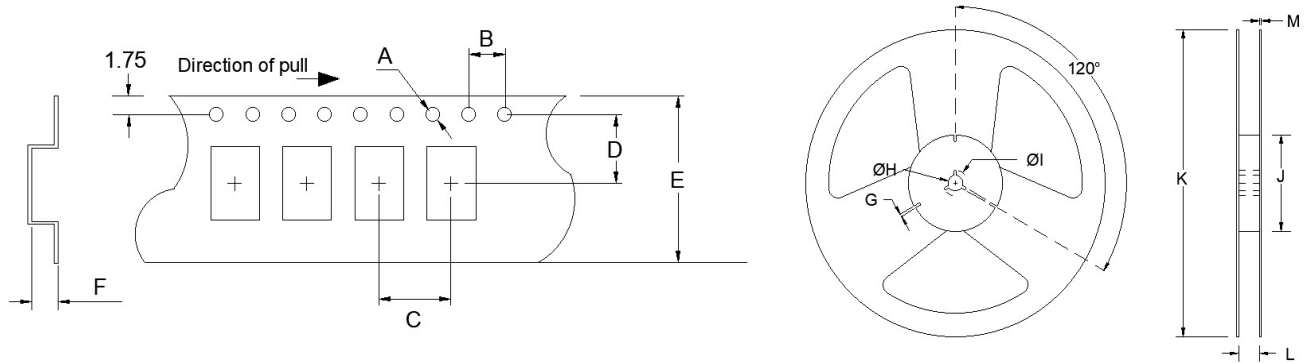
# FC6BS

(Former FMB)

6mm x 3.5mm  
Ceramic SMD Crystal



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	1.8	-T1 = 1,000 -T2 = 2,000	2.0	ø13	ø21	ø80	ø178	13.5	2.0



## Available Options & Part Identification for Ceramic SMD Crystal FC6BS<sup>1</sup>

Sample PN: FC6BSCCEM25.0-T1

F	C6BS	C	C	E	M	25.0	-T1
<b>Fox</b>	<b>Model Number</b>	<b>Tolerance</b>	<b>Stability</b>	<b>Load Capacitance<sup>2</sup></b>	<b>Operating Temperature</b>	<b>Frequency (MHz)</b>	<b>Values Added Options</b>
		B = ±50 PPM <b>C = ±30 PPM</b> D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	B = ±50 PPM <b>C = ±30 PPM</b> D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM L = ±5 PPM	V = 7pF <b>E = 10pF</b> G = 12pF J = 15pF K = 16pF L = 18pF M = 20pF N = 22pF	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 <b>M = -40 to +85°C</b> P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C		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