



2.0 x 1.6mm Ceramic SMD Crystal C1BQ

DATASHEET

- Tolerances down to 10 PPM
- Stabilities down to 10 PPM
- Temperature Ranges as wide as -40°C to +85°C

• SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	16.000 ~ 54.000 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°C ~ +125°C
Shunt Capacitance (C ₀)	2 pF
Load Capacitance (C _L)	(See options on page 2)
Drive Level	0.1 mW
Aging per year	±5 PPM
Insulation resistance	500Mohm Min
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Fired Silver (Ag) Paste
Seal Method	Resin Seal
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

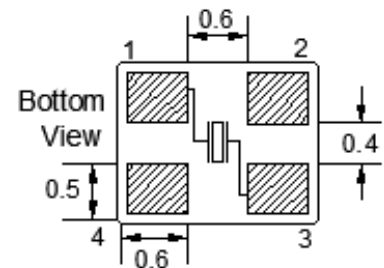
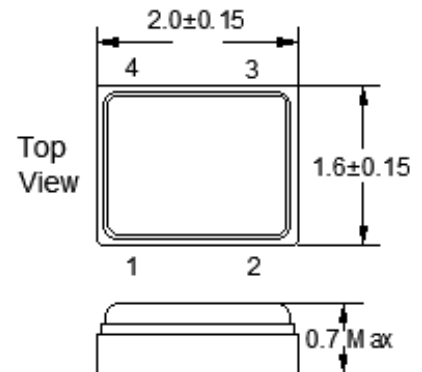
Frequency Range (MHz)	Operating Mode	Max ESR Ω
16.000 ~ 20.000	Fundamental	250
20.000+ ~ 23.000	Fundamental	150
23.000+ ~ 32.000	Fundamental	100
32.000+ ~ 54.000	Fundamental	80

• Available Operating Temperatures and Stabilities*

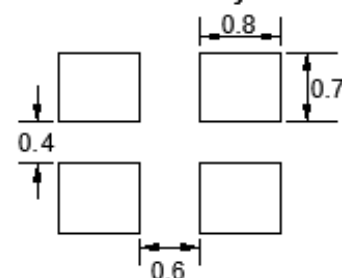
Operating Temperature	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM
-10 ~ +60°C	O	O	O	O	O	O
-20 ~ +70°C	O	O	O	O	O	O
-30 ~ +85°C	X	X	O	O	O	O
-40 ~ +85°C	X	X	O	O	O	O

Key: O=Available, X=Not Available

*Does not imply a stocked part.



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.



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Title / Description: C1BQ SERIES STANDARD SPECIFICATIONS

Drawing Number: C1BQ-DOC-1

Rev: C

Part Number:

Cage: 61429

Draftsperson: BEC

Approved: MAJ

Revision Date: 10/26/2020



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DATASHEET

• TAPE SPECIFICATIONS (millimeters)						• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	STD Reel QTY	G	H	I	J	K	L	M
Ø1.5	4.0	4.0	3.5	8.0	-T3 = 3,000 Default	2.0	Ø13.2	Ø21	Ø62	Ø178	9.0	1.2

Available Options & Part Identification for SMD Crystal Model C1BQ¹

F C1BQ E C E M 32.0

F	C1BQ	E	C	E	M	32.0
FOX	Model Number	Tolerance B = ±50PPM C = ±30PPM D = ±25PPM E = ±20PPM F = ±15PPM H = ±10PPM	Stability B = ±50PPM C = ±30PPM D = ±25PPM E = ±20PPM F = ±15PPM H = ±10PPM	Load Capacitance² V = 7 pF D = 8 pF E = 10 pF G = 12 pF L = 18 pF M = 20 pF	Operating Temperature D = -10 ~+60°C F = -20 ~+70°C K = -30 ~+85°C M = -40 ~+85°C	Frequency (MHz)

¹ Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

² Listed Load Capacitances represent those most commonly used. Other load capacitance values are available.



Corporate Headquarters

5570 Enterprise Parkway
Fort Myers, FL 33905
<http://www.FOXONLINE.com>

Sales

1-888-GET-2-FOX (1-888-438-2369) or
1-239-693-0099
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