



SMD Crystal

C7BQ

(former FQ7050B)

DATASHEET

- Tolerances down to 20 PPM
- Stabilities down to 20 PPM
- Operating Temperature Range up to -40°C ~ +85°C

• C7BQ STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	6.000 ~ 40.000 MHz*
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C Over Operating Temp Range	(See options below)
Temperature Range	
Operating (T _{OPR})	(See options on page 2)
Storage (T _{STG})	-40°C ~ +85°C
Shunt Capacitance (C ₀)	5 pF
Load Capacitance (C _L)	(See options on page 2)
Drive Level	0.5 mW
Aging per year	±5 PPM
Termination Finish	Au
Seam Method	Resin Sealed
Lead (Pb) Free	Yes
RoHS/REACH Complaint	Yes

* Up to 40.000 MHz is available if this device is replacing an existing 5 x 7mm package. For new designs, above 12.000MHz, we recommend the smaller (C6BQ & C5BQ) packages. Small quantities above 12MHz are only available in the smaller sizes. If you have any questions, please call Customer Support at 1-888-GET-2-FOX.

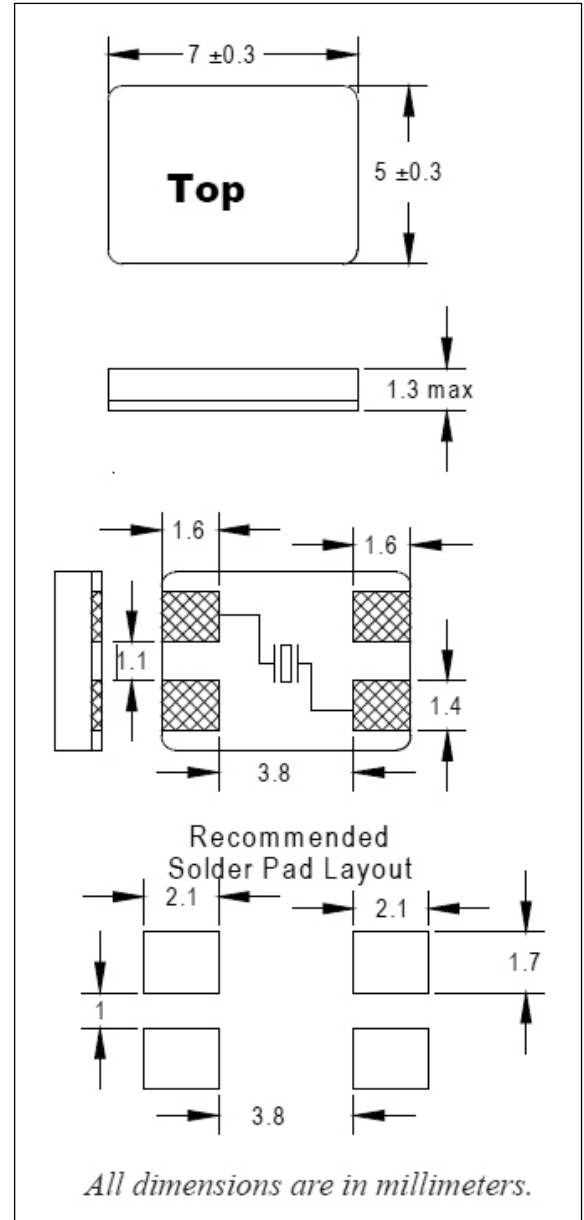
Frequency Range (MHz)	Operating Mode	Max ESR Ω
6.000 ~ 15.999999	Fundamental	80
16.000 ~ 40.000	Fundamental	50

• Available Operating Temperatures and Stabilities

Stability Temperature	±20 PPM	±25 PPM	±30 PPM	±50 PPM
0 ~+70°C	○	○	○	○
-20 ~+70°C	○	○	○	○
-40 ~+85°C	Δ	○	○	○

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

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.



Title / Description: C7BQ STANDARD SPECIFICATIONS	
Drawing Number: 101154	Size: A
Part Number:	Cage: 61429
Draftperson: CMR	Approved: RB
	Revision Date: 03/20/2016

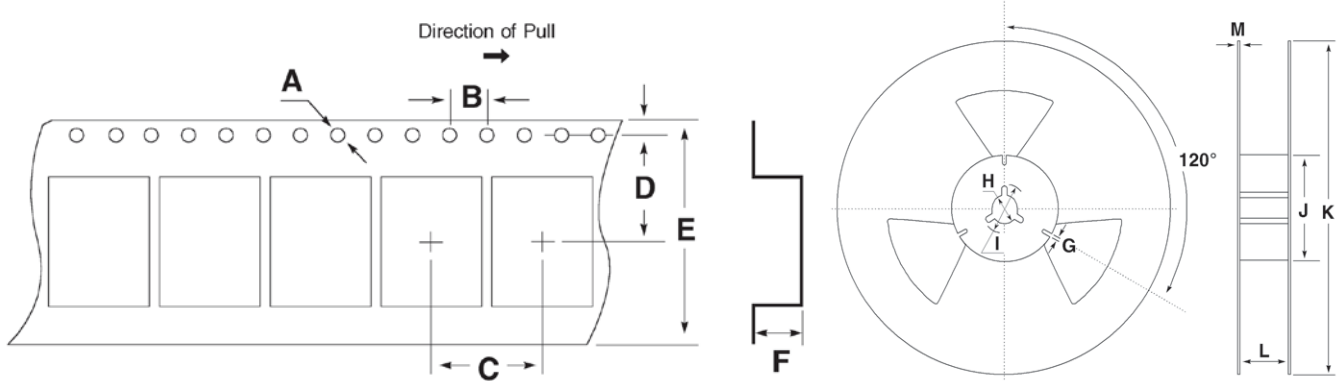


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• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	STD Reel QTY	G	H	I	J	K	L	M
Ø1.5	4.0	8.0	7.5	16.0	2.0	1,000	2.0	Ø13	Ø21	Ø62.5	Ø178	16.4	2.0



Available Options & Part Identification for SMD Crystal C7BQ*

F C7BQ C C M C 8.0

F	C7BQ	C	C	M	C	8.0
<u>FOX</u>	<u>Model Number</u>	<u>Tolerance</u> B=50ppm C=30ppm D=25ppm E=20ppm	<u>Stability</u> B=50ppm C=30ppm D=25ppm E=20ppm	<u>Load Capacitance</u> E=10pF G=12pF U=13pF J=15pF K=16pF L=18pF M=20pF	<u>Operating Temperature</u> C=0 to +70C F=-20 to +70C M=-40 to +85C	<u>Frequency (MHz)</u>

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

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• C7BQ (Former FQ7050) Standard Crystals

Part Number	Frequency	Tolerance	Stability	Temp Range	CL
FQ7050B-6.000	6.000000	+/- 30 ppm	+/- 30 ppm	0 to +70 C	20pF
FQ7050B-7.3728	7.372800	+/- 30 ppm	+/- 30 ppm	0 to +70 C	20pF
FQ7050B-8.000	8.000000	+/- 30 ppm	+/- 30 ppm	0 to +70 C	20pF
FQ7050BR-6.000	6.000000	+/- 30 ppm	+/- 50 ppm	-40 to +85 C	20pF
FQ7050BR-7.3728	7.372800	+/- 30 ppm	+/- 50 ppm	-40 to +85 C	20pF
FQ7050BR-8.000	8.000000	+/- 30 ppm	+/- 50 ppm	-40 to +85 C	20pF



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For datasheet type definitions and a glossary of common terms, visit <http://www.foxonline.com/tgcrystals.html>.



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