



# SMD Crystal

Discontinued 4/20/2018 -Reference PCN# 1001-1

# 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 <sub>OPR</sub> )	(See options on page 2)
Storage (T <sub>STG</sub> )	-40°C ~ +85°C
Shunt Capacitance (C <sub>0</sub> )	5 pF
Load Capacitance (C <sub>L</sub> )	(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.

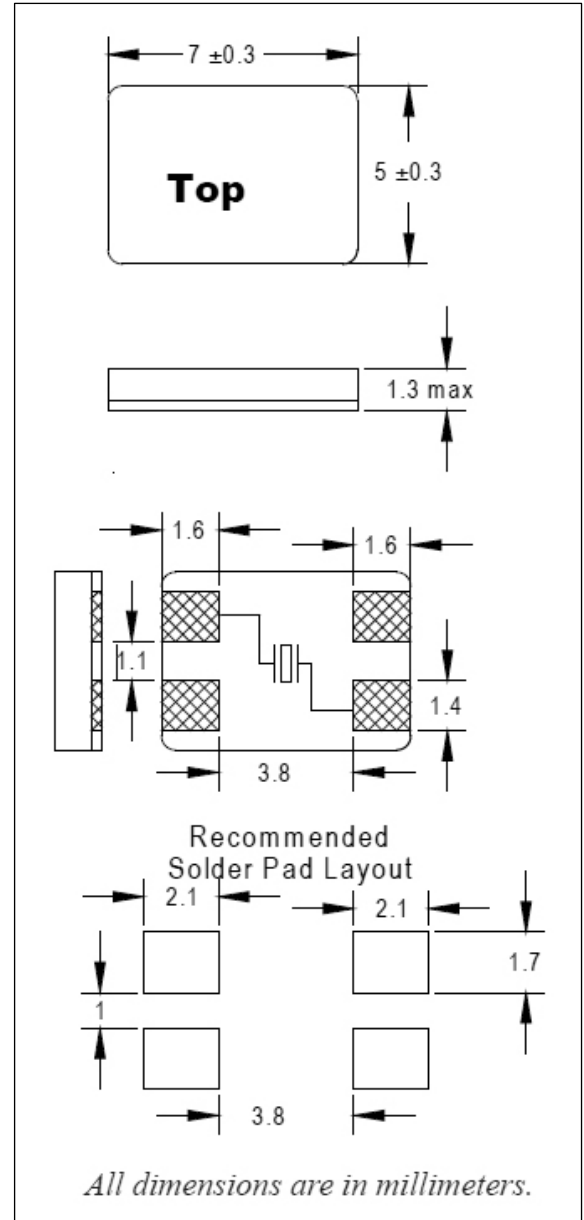
Frequency Range (MHz)	Operating Mode	Max ESR Ω
6.000 ~ 15.999999	Fundamental	80
16.000 ~ 40.000	Fundamental	50

## • 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: O=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

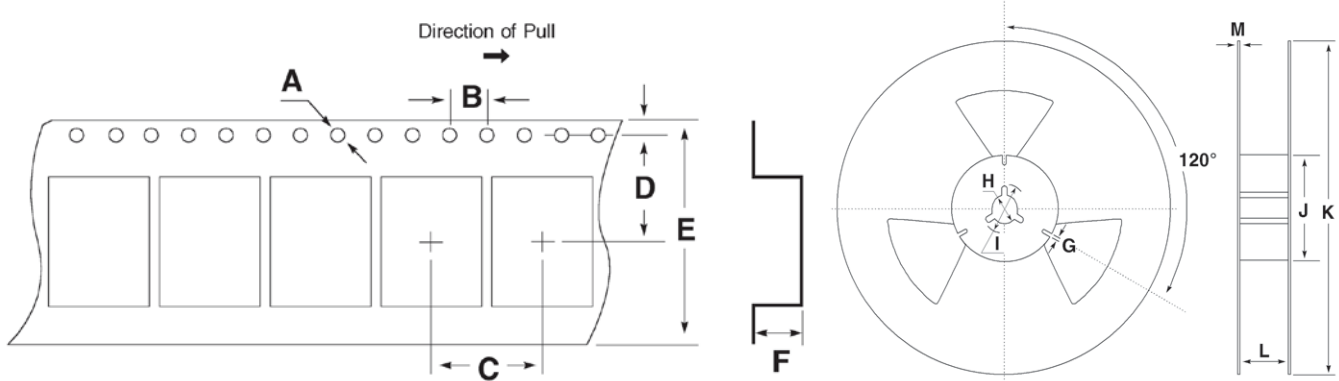


# SMD Crystal

# C7BQ

(former FQ7050B)  
DATASHEET

• 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

<b>F</b>	<b>C7BQ</b>	<b>C</b>	<b>C</b>	<b>M</b>	<b>C</b>	<b>8.0</b>
<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.

<p>© Copyright 2017 Fox Electronics, All rights reserved</p>	<b>Title / Description:</b> C7BQ STANDARD SPECIFICATIONS	
	<b>Drawing Number:</b> 101154	<b>Size:</b> A
	<b>Part Number:</b>	<b>Cage:</b> 61429
	<b>Draftperson:</b> CMR	<b>Approved:</b> RB
		<b>Revision Date:</b> 03/20/2016



# SMD Crystal

**C7BQ**  
(former FQ7050B)  
**DATASHEET**

## • 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



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  
<http://www.FOXONLINE.com/repdisty>

Tech Support  
<http://www.FOXONLINE.com/email>

PRODUCT USE: Fox Electronics reserves the right to modify the products and/or specifications described herein at any time and at Fox Electronics' sole discretion. All information in this document, including descriptions of product features and performance, is subject to change without notice. Performance specifications and the operating parameters of the described products are determined in the independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of Fox Electronics' products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of Fox Electronics or any third parties.

Fox Electronics' products are not intended for use in applications involving extreme environmental conditions or in life support systems or similar devices where the failure or malfunction of a Fox Electronics product can be reasonably expected to significantly affect the health or safety of users. Anyone using a Fox Electronics product in such a manner does so at their own risk, absent an express, written agreement by Fox Electronics.

Fox Electronics and the Fox logo are registered trademarks of Fox Electronics. Product specification is subject to change without notice. Other trademarks and service marks used herein, including protected names, logos and designs, are the property of Fox Electronics or their respective third party owners.

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



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