



# 6.0mm x 3.5mm Ceramic SMD Crystal

## C6AS

(Former FQA)

## DATASHEET

- Tolerances down to  $\pm 20$ PPM
- Stabilities down to  $\pm 20$ PPM
- Temperature Ranges to  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

### • SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	8.000 ~ 67.000MHz
Frequency Tolerance @ 25°C	(See options on page 3)
Frequency Stability, ref to 25°C	(See options below)
Temperature Range	
Operating (TOPR)	(See options below)
Storage (TSTG)	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Shunt Capacitance (Co)	5pF
Load Capacitance (CL)	(See options on page 2)
Drive Level	0.1mW
Aging per year	$\pm 5.0$ PPM
Maximum Soldering Temp / Time	$260^{\circ}\text{C}$ / 10Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Resin
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

Frequency Range	Operating Mode	Max ESR $\Omega$
8.000 ~ 8.999999	Fundamental	150
9.000 ~ 9.999999	Fundamental	80
10.000 ~ 16.000	Fundamental	60
16+ ~ 50.000	Fundamental	40
40.000 ~ 67.000	3 <sup>rd</sup> OT	70

### Available Operating Temperatures and Stabilities

Stability Temperature	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM
$0^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	O	O	O	O
$-10^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	O	O	O	O
$-20^{\circ}\text{C}$ to $+70^{\circ}\text{C}$	O	O	O	O
$-30^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	X	X	O	O
$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	X	X	O	O

Key: O=Available, X=Not Available



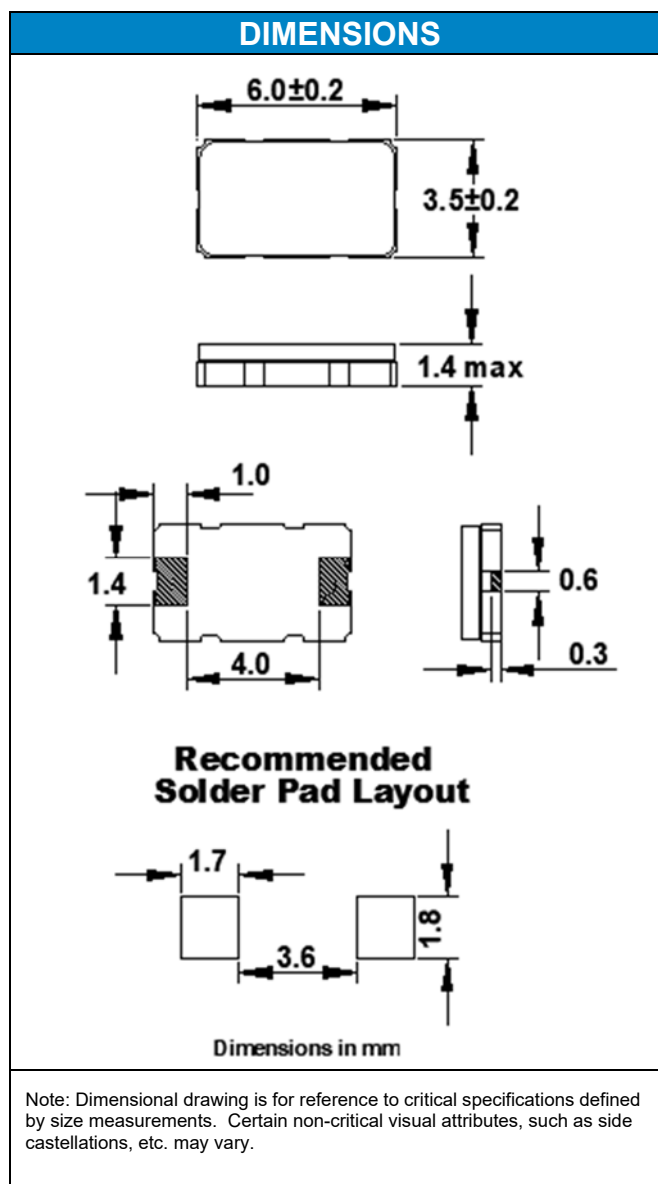


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• TAPE SPECIFICATIONS (millimeters)							• REEL SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	Reel QTY	G	H	I	J	K	L	M
Ø1.5	4.0	8.0	5.5	12.0	1.9	-T1 = 1,000 -T2 = 2,000	2.0	Ø13	Ø21	Ø80	Ø250	13.5	2.0

### Available Options & Part Identification for Crystal Model C6AS<sup>1</sup>

#### F C6AS B B M E 12.0

F	C6AS	B	B	M	E	12.0
FOX	Model Number	Tolerance	Stability	Load Capacitance <sup>2</sup>	Operating Temperature	Frequency (MHz)
		<b>B = ±50 PPM</b> C = ±30 PPM D = ±25 PPM E = ±20 PPM	A = ±100PPM <b>B = ±50 PPM</b> C = ±30 PPM D = ±25 PPM E = ±20 PPM	B = 10 pF G = 12 pF U = 13 pF K = 16 pF L = 18 pF <b>M = 20 pF</b>	C = 0 ~ +70°C <b>E = -10 ~ +70°C</b> F = -20 ~ +70°C K = -30 ~ +85°C M = -40 ~ +85°C	

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

<sup>2</sup> Listed load capacitances represent the most commonly used. Other load capacitances are available. Contact Fox Technical Support for assistance.



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**Title / Description:** C6AS SERIES STANDARD SPECIFICATIONS

**Drawing Number:** C6AS-DOC-1

**Part Number:**

**Draftsperson:** BEC

**Size:** A

**Cage:** 61429

**Approved:** MAJ

**Revision Date:** 11/13/2019

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