

## Features

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

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	8.000 ~ 67.000 MHz
Frequency Tolerance @ 25°C	(See options below)
Frequency Stability, ref 25°C	(See options below)
Temperature Range	
Operating ( $T_{OPR}$ )	(See options below)
Storage ( $T_{STG}$ )	$-40^{\circ}\text{C}$ ~ $+85^{\circ}\text{C}$
Shunt Capacitance ( $C_0$ )	5 pF
Load Capacitance ( $C_L$ )	(See options below)
Drive Level	100 $\mu$ W
Aging per year (@ 25°C)	$\pm 5.0$ 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	Resin
Lead (Pb) Free	Yes
RoHS Compliant	Yes

Frequency Range (MHz)	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

DIMENSIONS / MECHANICAL SPECIFICATIONS
<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	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM
$0^{\circ}\text{C}$ ~ $+70^{\circ}\text{C}$	O	O	O	O
$-10^{\circ}\text{C}$ ~ $+70^{\circ}\text{C}$	O	O	O	O
$-20^{\circ}\text{C}$ ~ $+70^{\circ}\text{C}$	O	O	O	O
$-30^{\circ}\text{C}$ ~ $+85^{\circ}\text{C}$	X	X	O	O
$40^{\circ}\text{C}$ ~ $+85^{\circ}\text{C}$	X	X	O	O

Key: O = Available, X = Not Available

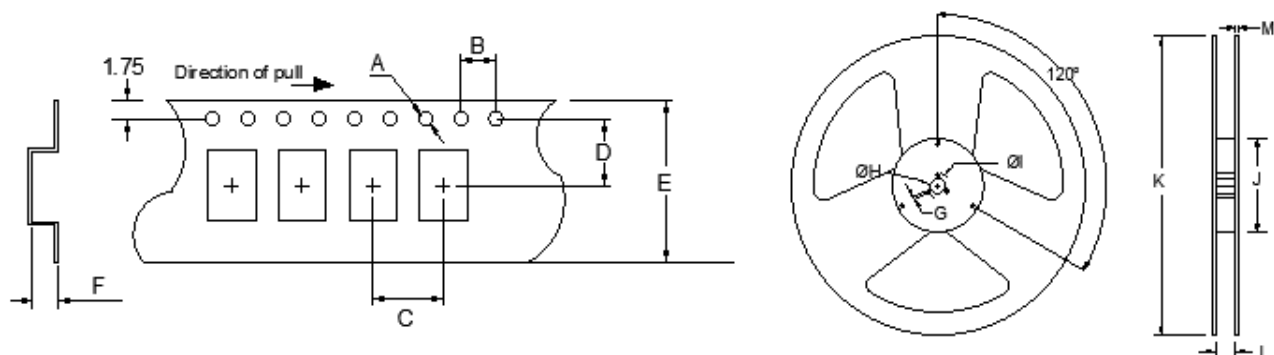
# FC6AS

(Former FQA)

6.0mm 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
ø1.5	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>

Sample PN: FC6ASBBME12.0-T1

F	C6AS	B	B	M	E	12.0	-T1
<b>Fox</b>	<b>Model Number</b>	<b>Tolerance</b> B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM	<b>Stability</b> A = ±100 PPM B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM	<b>Load Capacitance<sup>2</sup></b> B = 10pF G = 12pF U = 13pF K = 16pF L = 18pF M = 20pF	<b>Operating Temperature</b> C = 0 ~ +70°C E = -10 ~ +70°C F = -20 ~ +70°C K = -30 ~ +85°C M = -40 ~ +85°C	<b>Frequency (MHz)</b>	<b>Values Added Options</b> 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