

# FC5BQ

(Former FQ5032B)

5.0mm x 3.2mm

SMD Crystal



## Features

- Tolerances down to  $\pm 20$  PPM
- Stabilities down to  $\pm 10$  PPM

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	8.000 ~ 48.000 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°C ~ +85°C
Shunt Capacitance ( $C_0$ )	5 pF
Load Capacitance ( $C_L$ )	(See options below)
Drive Level	0.5mW
Aging per year (@ 25°C)	$\pm 5$ PPM
Termination Finish	Ag
Seal Method	Resin
Lead (Pb) Free	Yes
RoHS Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR $\Omega$
8.000000 ~ 11.999999	Fundamental	100
12.000000 ~ 16.000	Fundamental	80
16.000001 ~ 48.000	Fundamental	50

DIMENSIONS / MECHANICAL SPECIFICATIONS
<p>The diagram shows three views of the crystal: a top view with dimensions 5±0.2 mm (total length) and 3.2±0.2 mm (width); a side view showing a height of 1.2 Max mm; and a bottom view showing a length of 2.8 mm and a width of 1.4 mm. A 'Recommended Solder Pad Layout' is shown with dimensions: 2.2 mm between pads, 1.8 mm between pads, 1.3 mm between pads, and 1.1 mm and 0.8 mm for individual pad dimensions.</p> <p>All dimensions are in millimeters.</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	$\pm 10$ PPM	$\pm 15$ PPM	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM
0 ~+70°C	O	O	O	O	O	O
-20 ~+70°C	O	O	O	O	O	O
-40 ~+85°C	X	X	X	X	O	O

Key: O = Available, X = Not Available, Δ = Consult Fox Technical Support \*Does not imply a stocked part.

# FC5BQ

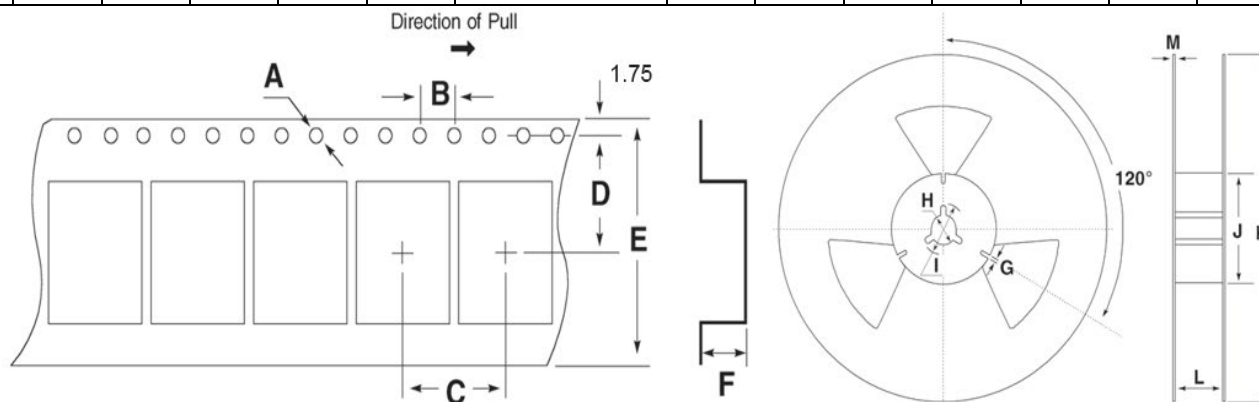
(Former FQ5032B)

5.0mm x 3.2mm

SMD Crystal



TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	8.0	5.5	12.0	1.4	-T1 = 1,000	2.0	ø13	ø21	ø62	ø180	13.5	2.0



## Available Options & Part Identification for SMD Crystal C5BQ<sup>1</sup>

Sample PN: FC5BQCCMC25.0-T1

F	C5BQ	C	C	M	C	25.0	-T1
<b>Fox</b>	<b>Model Number</b>	<b>Tolerance</b>	<b>Stability</b>	<b>Load Capacitance<sup>2</sup></b>	<b>Operating Temperature</b>	<b>Frequency (MHz)</b>	<b>Values Added Options</b>
		B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM	B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	V = 7pF D = 8pF E = 10pF G = 12pF J = 15pF K = 16pF L = 18pF M = 20pF	C = 0 to +70°C F = -20 to +70°C M = -40 to +85°C		Blank = Bulk T1 = 1,000 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