## FCABS





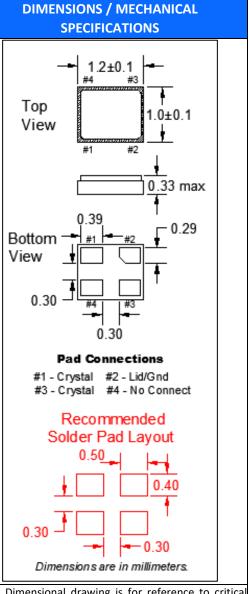
Features

- Tolerances down to ±10 PPM
- Stabilities down to ±10 PPM
- Temperature Ranges as wide as -40°C to +85°C

STANDARD SPECIFICATIONS						
PARAMETERS	MAX (Unless otherwise noted)					
Frequency Range	32.000 ~ 80.000 MHz					
Frequency Tolerance @ 25°C	(See options below)					
Frequency Stability, ref 25°C	(See options below)					
Temperature Range						
Operating (TOPR)	(See options below)					
Storage (T <sub>STG</sub> )	-55°C ~ +125°C					
Shunt Capacitance (C <sub>0</sub> )	2 pF					
Load Capacitance (C∟)	(See options below)					
Drive Level	100µW (10µW Typical)					
Aging per year (@ 25°C)	±3 PPM					
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2					
Moisture Sensitivity Level (MSL) per	N/A					
J-STD-033						
Termination Finish	Au (0.3~1μm) over					
	Ni (1.27~8.89µm)					
Lead (Pb) Free	Yes					
RoHS Compliant	Yes, no exemptions					
REACH Compliant (latest version)	Yes					

Frequency Range (MHz)	<b>Operating Mode</b>	Max ESR $\Omega$
32.000 ~ 32.999999	Fundamental	100
33.000 ~ 36.999999	Fundamental	80
37.000 ~ 80.000	Fundamental	60

AVAILABLE OPERATING TEMPERATURES AND STABILITIES							
Operating Temperature	±10 PPM	±15 PPM	±20 PPM	±25PPM			
-20 ~ +70°C	0	0	0	0			
-30 ~ +85°C	Х	0	0	0			
-40 ~ +85°C	Х	0	0	0			
Key: O = Available, X = Not Available							



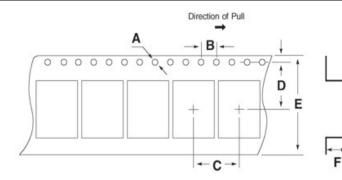
Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.

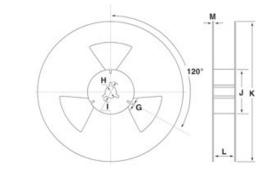
## FCABS

## 1.2mm x 1.0mm Ceramic SMD Crystal



TAPE SPECIFICATIONS (mm)					REEL SPECIFICATIONS (mm)								
Α	В	С	D	E	F	REEL QTY	G	Н	Ι	J	K	L	М
ø1.5	4.0	4.0	3.5	8.0	0.45	-T5 = 5,000	2.0	Ø13	Ø21	Ø60	Ø180	9.0	1.5





Available Options & Part Identification for CABS <sup>1</sup> Sample PN: <u>FCABSFFDM40.0-T5</u>							
F	CABS	F	F	D	М	40.0	-T5
Fox	Model	<u>Tolerance</u>	<u>Stability</u>	<u>Load</u>	<b>Operating</b>	<u>Frequency</u>	Values Added
	<u>Number</u>	D = ±25 PPM	D = ±25 PPM	Capacitance <sup>2</sup>	<b>Temperature</b>	<u>(MHz)</u>	<b>Options</b>
		$E = \pm 20 PPM$	$E = \pm 20 PPM$	B = 6 pF	F = -20 ~ +70°C		Blank = Bulk
		$F = \pm 15 PPM$	F = ±15 PPM	V = 7 pF	K = -30 ~ +85°C		T5 = 5,000 pcs
		$H = \pm 10 PPM$	H = ±10 PPM	D = 8 pF	M = -40 ~ +85°C		
				E = 10 pF			
				G = 12 pF			

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	