

Features

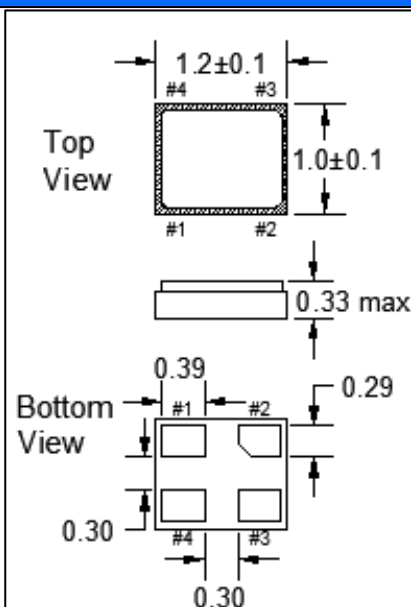
- Tolerances down to ± 10 PPM
- Stabilities down to ± 10 PPM
- Temperature Ranges as wide as -40°C to $+85^{\circ}\text{C}$

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 (T_{OPR})	(See options below)
Storage (T_{STG})	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Shunt Capacitance (C_0)	2 pF
Load Capacitance (C_L)	(See options below)
Drive Level	100 μW (10 μW Typical)
Aging per year (@ 25°C)	± 3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL) per J-STD-033	N/A
Termination Finish	Au (0.3~1 μm) over Ni (1.27~8.89 μm)
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant (latest version)	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
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	± 25 PPM
$-20 \sim +70^{\circ}\text{C}$	O	O	O	O
$-30 \sim +85^{\circ}\text{C}$	X	O	O	O
$-40 \sim +85^{\circ}\text{C}$	X	O	O	O
Key: O = Available, X = Not Available				

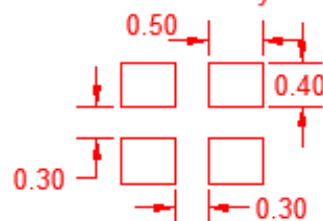
DIMENSIONS / MECHANICAL SPECIFICATIONS



Pad Connections

#1 - Crystal #2 - Lid/Gnd
#3 - Crystal #4 - No Connect

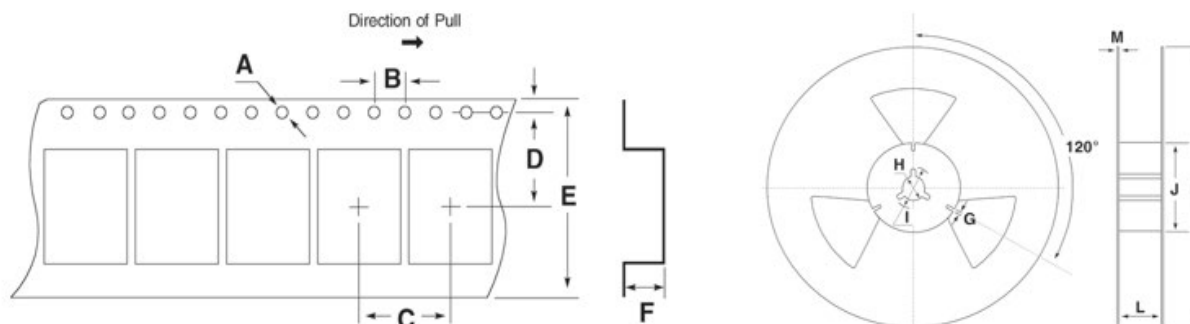
Recommended Solder Pad Layout



Dimensions are in millimeters.

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.

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	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 CABS¹

Sample PN: **FCABSFFDM40.0-T5**

F	CABS	F	F	D	M	40.0	-T5
Fox	Model Number	Tolerance D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	Stability D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	Load Capacitance² B = 6 pF V = 7 pF D = 8 pF E = 10 pF G = 12 pF	Operating Temperature F = -20 ~ +70°C K = -30 ~ +85°C M = -40 ~ +85°C	Frequency (MHz)	Values Added Options Blank = Bulk T5 = 5,000 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

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