



1.2x1.0mm Ceramic SMD Crystal CABS

DATASHEET

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

• SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	32.000 ~ 80.000 MHz
Frequency Tolerance @ 25°C	(See options on page 2)
Frequency Stability, ref @ 25°C	(See options below)
Temperature Range	
Operating (TOPR)	(See options below)
Storage (TSTG)	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Shunt Capacitance (C_0)	2 pF
Load Capacitance (C_L)	(See options on page 2)
Drive Level	100 μW (10 μW typical)
Aging per year	± 3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

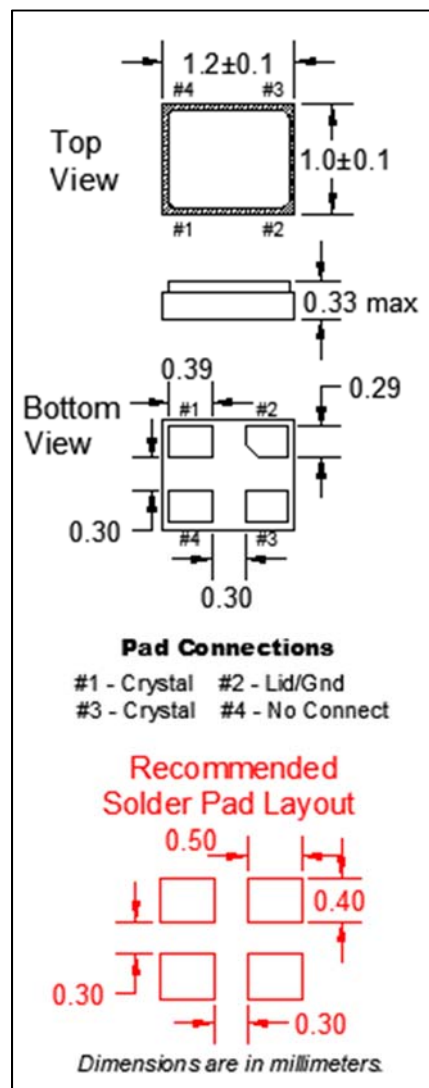
Frequency Range (MHz)	Operating Mode	Max ESR Ω
32.000 ~ 32.999999	Fundamental	100
33.000 ~ 36.999999	Fundamental	80
37.000 ~ 80.000	Fundamental	60

• 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

*Does not imply a stocked part.



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.





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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	4.0	3.5	8.0	0.45	-T3 = 3,000 -T5 = 5,000	2.0	Ø13	Ø21	Ø60	Ø180	9.0	1.5

Available Options & Part Identification for CABS*

F CABS F F D M 40.0

F	CABS	F	F	D	M	40.0
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 Capacitance¹ 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)

*Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.

¹Listed load capacitances represent the most commonly used. Other load capacitances are available.



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