CERAMIC SMD MICROPROCESSOR CRYSTAL



8.0 x 4.5 x 1.4mm

ABM2

RoHS/RoHS II Compliant

Pb in glass (exempt per RoHS II 2011/65/EU Annex (5))

Moisture Sensitivity Level (MSL) –This product is Hermetically Sealed and not Moisture Sensitive -MSL = N/A: Not Applicable

FEATURES:

- Low in height; suitable for thin equipment
- Glass sealed package assures high reliability and high temperature operation
- Tight tolerance and stability available
- Suitable for RoHS compliant reflow
- Low cost glass sealed crystal solution

APPLICATIONS:

- High density applications
- Modems, communication and test equipment
- PMCIA, Wireless applications
- Microprocessor crystals

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	8.000	-----	100.000	MHz	Fundamental
Operation mode	8.000	-----	40.000		Fundamental AT-cut (Standard)
	40.001	-----	100.000		3rd OT AT-cut (Standard)
	40.001	-----	60.000		Fundamental AT-cut (See options)
Operating Temperature	-10	-----	+60	ºC	See options
Storage Temperature	-40	-----	+85	ºC	
Frequency Tolerance @+25ºC	-50	-----	+50	ppm	See options
Frequency Stability over the Operating Temperature (ref. to +25ºC)	-50	-----	+50	ppm	See options
Equivalent series resistance	-----	-----	100	Ω	8.000 – 10.000MHz (Fundamental)
	-----	-----	60		10.001 – 15.999MHz (Fundamental)
	-----	-----	50		16.000 – 60.000MHz (Fundamental)
	-----	-----	70		40.000 – 100.000MHz (3rd OT)
Shunt capacitance (C0)	-----	-----	7	pF	-----
Load capacitance (CL)	-----	18	-----	pF	See options
Drive Level	-----	10	100	µW	
Aging @ 25ºC±3ºC	-----	-----	±5	ppm	First year
Insulation Resistance	500	-----	-----	MΩ	@ 100Vdc

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OPTIONS AND PART IDENTIFICATION: (Left blank if standard)

ABM2-[ ] MHz -[ ] -[ ] -[ ][ ][ ] -[ ] -[ ]

Frequency in MHz
e.g. 8.000MHz
14.31818MHz
26.000MHz

Load Capacitance (pF)
Please specify CL in pF
(8 to 33pF) or S for series
Please contact ABRACON for other values

Custom ESR if other than standard
R□
□: Specify a value in Ω
(e.g.: R40)

Operating Temp. (See Table 1 for details)

E: 0°C ~ +70°C
B: -20°C ~ +70°C
C: -30°C ~ +70°C
N: -30°C ~ +85°C
D: -40°C ~ +85°C
J: -40°C ~ +105°C
K: -40°C ~ +125°C

Freq. Tolerance

1: ± 10 ppm
7: ± 15 ppm
2: ± 20 ppm
3: ± 25 ppm
4: ± 30 ppm

Freq. Stability (See Table 1 for details)

U: ±10 ppm
G: ±15 ppm
X: ±20 ppm
W: ±25 ppm
Y: ±30 ppm
H: ±35 ppm
A: ±80 ppm
Q: ±100 ppm
V: ±120 ppm
P: ±150 ppm

Mode
F: Fund AT for >40MHz

Packaging

Blank: Bulk
T: 1k reel
T2: 250pcs/reel

Note: See Table 1 for the availability of Operating Temp. and Freq. Stability combination

Table 1 Available Combinations of Operating Temp. and Freq. Stability

Operating Temp.	Freq. Stability					
	U:±10ppm	G:±15ppm	X:±20ppm	W:±25ppm	Y:±30ppm	H:±35ppm
Std: -10°C ~ +60°C	√	√	√	√	√	√
E: 0°C ~ +70°C		√	√	√	√	√
B: -20°C ~ +70°C		√	√	√	√	√
C: -30°C ~ +70°C				√	√	√
N: -30°C ~ +85°C					√	√
D: -40°C ~ +85°C					√*	√*
J: -40°C ~ +105°C						
K: -40°C ~ +125°C						

Operating Temp.	Freq. Stability				
	Std:±50ppm	A:±80ppm	Q:±100ppm	V:±120ppm	P:±150ppm
Std: -10°C ~ +60°C	√	√	√	√	√
E: 0°C ~ +70°C	√	√	√	√	√
B: -20°C ~ +70°C	√	√	√	√	√
C: -30°C ~ +70°C	√	√	√	√	√
N: -30°C ~ +85°C	√	√	√	√	√
D: -40°C ~ +85°C	√*	√	√	√	√
J: -40°C ~ +105°C			√	√	√
K: -40°C ~ +125°C			√	√	√

Note: *: Availability depends on frequency.

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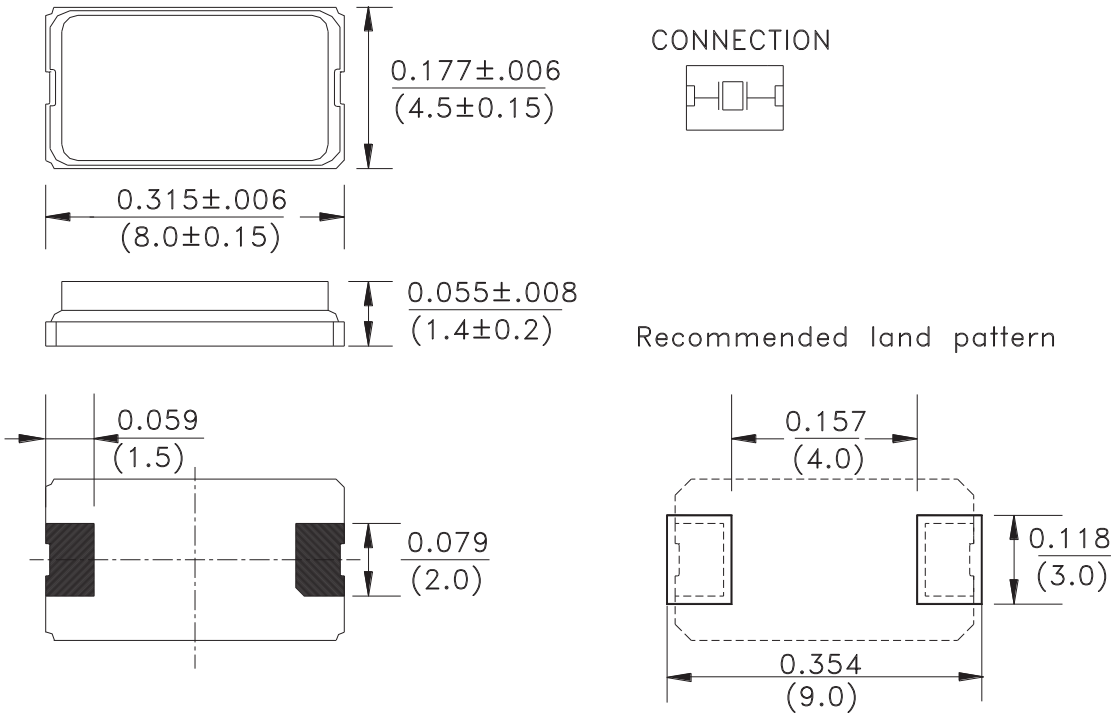


8.0 x 4.5 x 1.4mm

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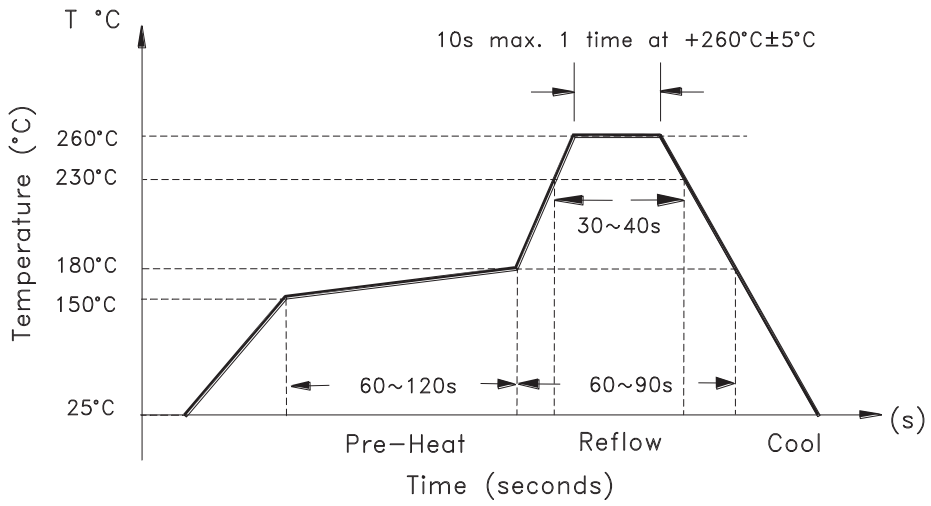
OUTLINE DIMENSION:



Note: Due to the availability of raw materials, the chamfer may not appear on the both pads. Be advised that this does not affect the electrical characteristics of the crystal in any way.

Dimensions: inches (mm)

REFLOW PROFILE:



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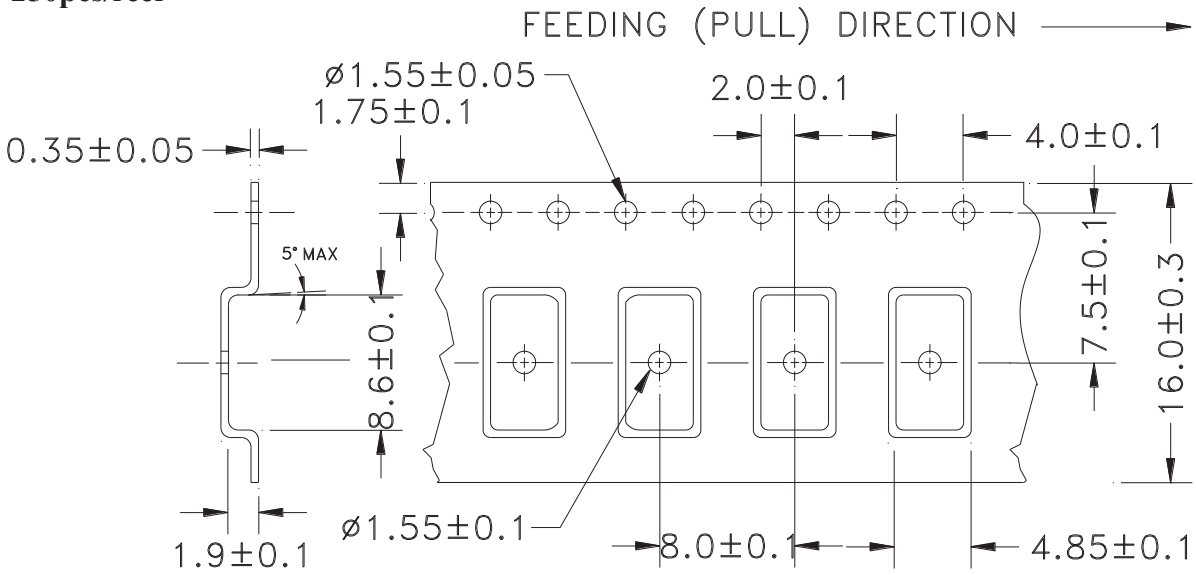
RoHS/RoHS II Compliant

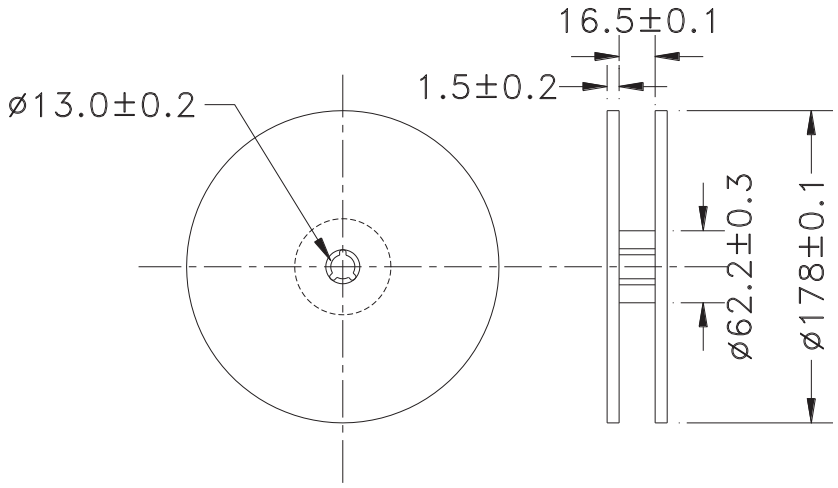
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TAPE & REEL:

T: 1000pcs/reel

T2: 250pcs/reel





Dimensions: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.