CERAMIC SMD MICRO MINIATURE MICROPROCESSOR CRYSTAL

ABM7

Pb in Glass
(exempt per RoHS 2002/95/EC Annex (5))

RoHS Compliant

6.0 x 3.5 x 1.4mm

FEATURES:

- Low in height (1.4 mm max.)
- Ceramic package assures high reliability
- Small size SMD, suitable for high density applications
- Superior heat-resistant glass sealing
- Wide operating temperature available

APPLICATIONS:

- Computers, Modems, Communication equipment
- Thin equipment
- Industrial wide temperature applications

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	8.000	-----	50.000 (*)	MHz	Fundamental
Operation mode	8.000	-----	39.999999		Fundamental AT-cut (Standard)
	40.000	-----	80.000		3rd OT AT-cut (Standard)
	40.000	-----	50.000		Fundamental AT-cut (See options)
Operating Temperature	-10	-----	+60	ºC	See options
Storage Temperature	-40	-----	+90	ºC	
Frequency Tolerance @+25°C	-50	-----	+50	ppm	See options
Frequency Stability over the Operating Temperature (ref. to +25°C)	-50	-----	+50	ppm	See options
Equivalent series resistance	See table 1 below			Ω	-----
Shunt capacitance (C0)	-----	-----	7	pF	-----
Load capacitance (CL)	-----	18	-----	pF	See options
Drive Level	-----	10	100	µW	
Aging@25°C±3°C	-----	-----	±5	ppm	First year
Insulation Resistance	500	-----	-----	MΩ	@ 100Vdc

(*) Frequency above 40MHz based on availability. Please contact ABRACON

Table 1

Frequency (MHz)	ESR(Ω) max.	Operation Mode
8.000 – 9.999	**100**	**Fundamental**
10.000 – 15.999	**60**	**Fundamental**
16.000 – 50.000	**50**	**Fundamental**
40.000 – 80.000	**70**	**3rd Overtone**

OPTIONS AND PART IDENTIFICATION: (left blank if standard)

ABM7-☐MHz -☐-☐-☐-☐-☐-☐-☐

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

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

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

Operating Temp.
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
L(***):-55°C to +125°C

(***) ±100 ppm **only**

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

Freq. Stability
U: ± 10 ppm(*)
G: ± 15 ppm(**)
X: ± 20 ppm
W: ± 25 ppm
Y: ± 30 ppm
H: ± 35 ppm
Q: ± 100 ppm

(*) -10°C to 60°C only.
(**) Contact ABRACON for availability for -40°C to +85°C

Mode
F: Fund AT for >40MHz

Packaging
Blank: Bulk
T: 1k or 2kpcs/reel
T2: 250pcs/reel

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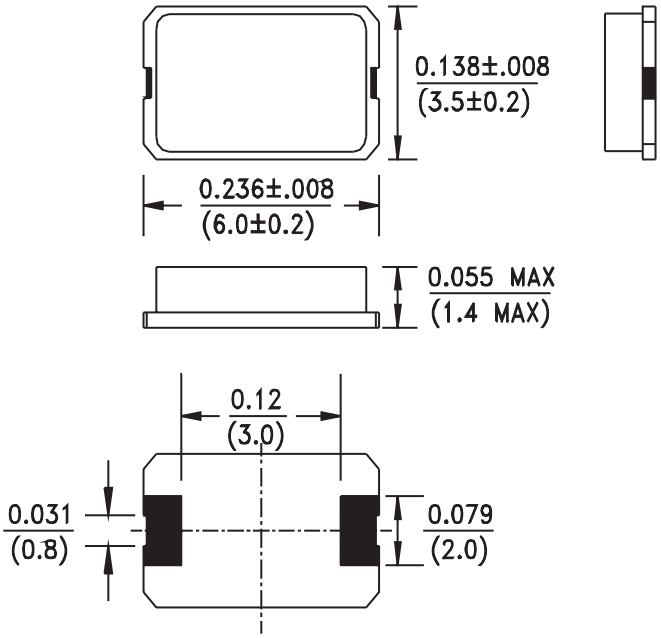
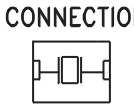
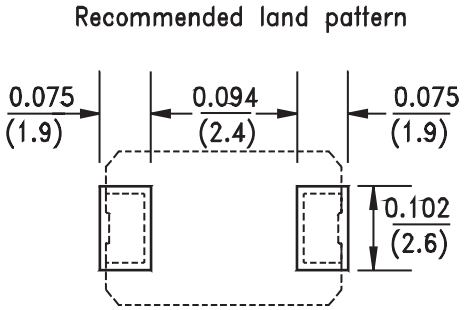
ABM7

6.0 x 3.5 x 1.4mm

OUTLINE DRAWING:

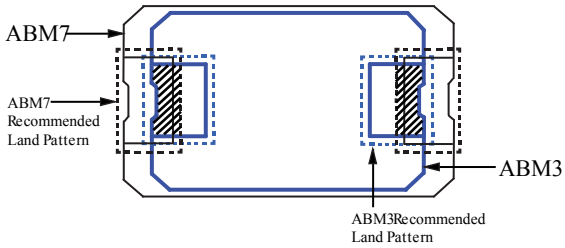






Note: Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 1. Be advised that this does not affect the electrical characteristics of the crystal in any way.

Land pattern compatibility between ABM3 and ABM7

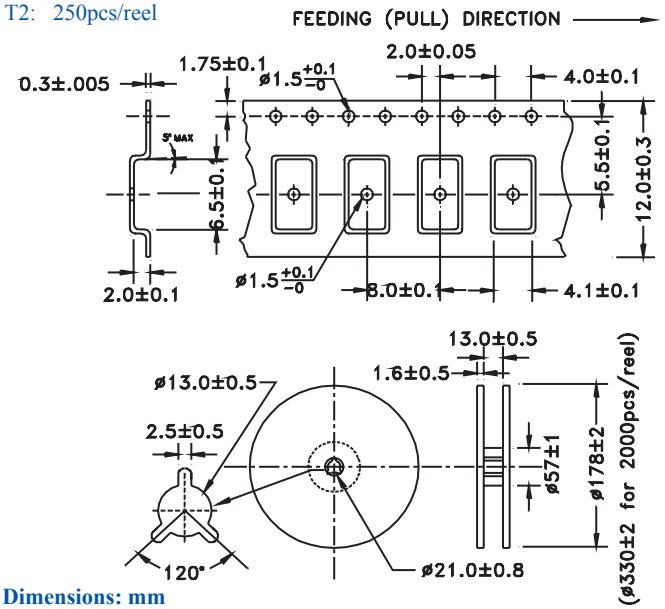


Dimensions: inch (mm)

TAPE & REEL:

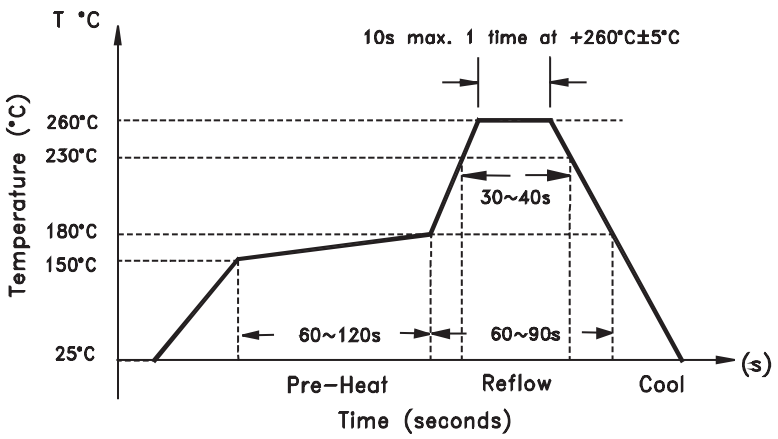
T: 1000pcs/reel or 2000pcs/reel

T2: 250pcs/reel



Dimensions: mm

REFLOW PROFILE:



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