# CERAMIC SMD MICRO MINIATURE MICROPROCESSOR CRYSTAL



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



6.0 x 3.5 x 1.4mm

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

#### **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		48.000	MHz	Fundamental AT-cut
Operating Temperature	-10		+60	°C	See options
Storage Temperature	-55		+125	°C	
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	7	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			ΜΩ	@ 100Vdc

#### Table 1

Frequency (MHz)	$ESR(\Omega)$ max.
8.000 - 9.999	100
10.000 – 11.999	80
12.000 - 15.999	60
16.000 - 48.000	50



## **CERAMIC SMD MICRO MINIATURE MICROPROCESSOR CRYSTAL**

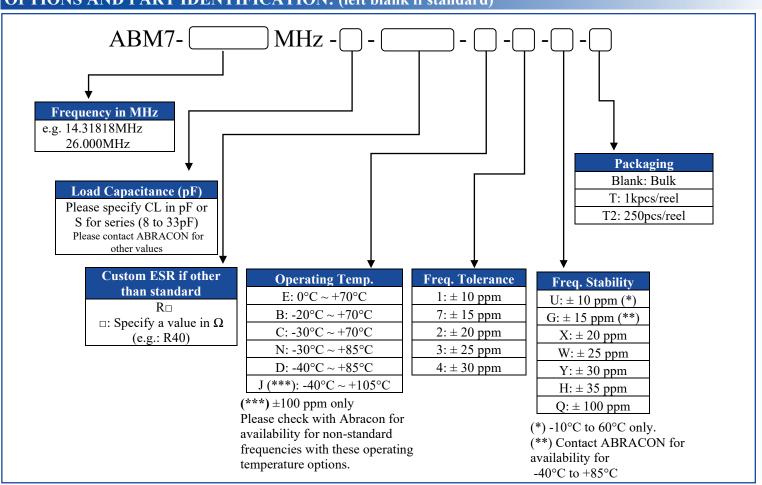
ABM7

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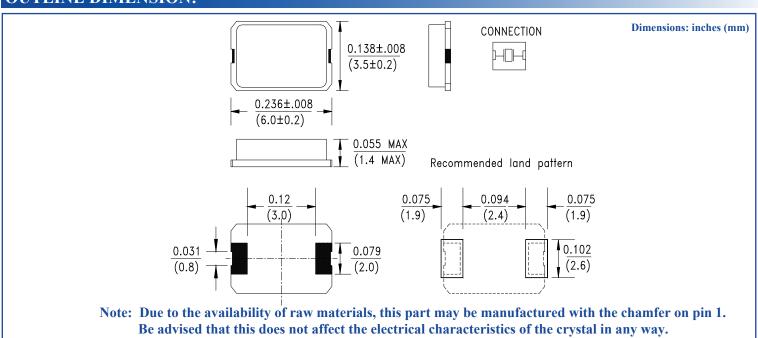


6.0 x 3.5 x 1.4mm

### **OPTIONS AND PART IDENTIFICATION:** (left blank if standard)



#### **OUTLINE DIMENSION:**





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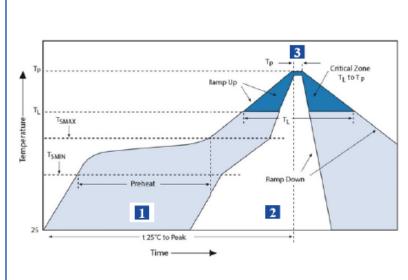
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#### **REFLOW PROFILE:**



Zone	Description	Tenperature	Times	
1	Preheat	Temn ~ Temax 150°C ~ 180°C	60 - 120 sec.	
2	Reflow	T <sub>L</sub> 230°C	30 ~ 40 sec.	
3	Peak heat	T <sub>P</sub> 260°C ± 5°C	10 sec. MAX	

### **TAPE & REEL:**

Packaging:

T: 1000pcs/reel FEEDING (PULL) DIRECTION T2: 250pcs/reel  $2.0 \pm 0.05$  $1.75 \pm 0.1$  $\begin{array}{c}
1 \\
\emptyset 1.5 \\
-0
\end{array}$  $4.0 \pm 0.1$  $0.3 \pm .005$ 5±0.1  $\emptyset 1.5 \frac{+0.1}{-0}$ **-**8.0±0.  $4.1 \pm 0.1$  $2.0 \pm 0.1$  $13.0 \pm 0.5$ ø330±2 for 2000pcs∕reel) 1.6±0.5 ø13.0±0.5  $2.5 \pm 0.5$ ø21.0±0.8 120

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**Dimensions: mm** 

## **Mouser Electronics**

**Authorized Distributor** 

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#### ABRACON:

ABM7-12.000MHZ-B4-T ABM7-13.000MHZ-B4-T ABM7-14.31818MHZ-B4-T ABM7-14.7456MHZ-B4-T ABM7
16.000MHZ-B4-T ABM7-18.432MHZ-B4-T ABM7-20.000MHZ-B4-T ABM7-22.1184MHZ-B4-T ABM7-24.576MHZ-B4-T ABM7-25.000MHZ-B4-T ABM7-32.000MHZ-D2Y-T ABM7-30.000MHZ-D2Y-T ABM7-30.000MH