CERAMIC SMD MICROPROCESSOR CRYSTAL

ABM2

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





8.0 x 4.5 x 1.4m m

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 (*)		Fundamental
Operation mode	8.000		40.000	MHz	Fundamental AT- cut (Standard)
	40.001		100.000		3 rd OT AT-cut (Standard)
	40.001		60.000 (*)		Fundamental AT- cut (See options)
Operating Temperature	-10		+60	°C	See options
Storage Temperature	-40		+85	°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		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

(*) Frequency between 50MHz and 60Mhz for fundamental, below 7MHz based on availability. Please contact ABRACON.

Table 1

> OPTIONS AND PART IDENTIFICATION:

Frequency (MHz)	ESR(Ω) max.	Operation Mode
7.000 - 9.999	80	Fundamental
10.000 - 15.999	60	Fundamental
16.000 - 60.000	50	Fundamental
40.000 - 100.000	70	3 rd Overtone

(Left blank if standard) **Packaging** Frequency in MHz 14.31818MHz Blank: Bulk 14.31818MHz T: 1k or 2kpcs/reel 26.000MHz T2: 250pcs/reel Load Capacitance (pF) Please specify CL in pF (8 to 33pF) or S for series F: Fund AT for >40MHz Please contact ABRACON for other values Freq. Stability Custom ESR if other Freq. Tolerance **Operating Temp.** U: ± 10 ppm(*) than standard 1: ± 10 ppm E: $0^{\circ}C \sim +70^{\circ}C$ G: \pm 15 ppm(**) $R \sqcap$ B: -20°C ~ +70°C $7: \pm 15 \text{ ppm}$ \Box : Specify a value in Ω $X: \pm 20 ppm$ 2: ± 20 ppm C: -30° C $\sim +70^{\circ}$ C (e.g.: R40) $W: \pm 25 ppm$ 3: ± 25 ppm $N: -30^{\circ}C \sim +85^{\circ}C$ $Y: \pm 30 ppm$ D: -40°C ~ +85°C $4:\pm30$ ppm H: ± 35 ppm J(***): -40°C ~ +105°C (*) -10°C to 60°C only. $A: \pm 80 \text{ ppm}$ (***) ±100 ppm only K(***): -40°C ~ +125°C (**) Contact ABRACON (****) Contact Abracon $Q: \pm 100 \text{ ppm}$

L(****):-55°C to +125°C

for availability for

-40°C to +85°C





for availability

 $V: \pm 120 \text{ ppm}$

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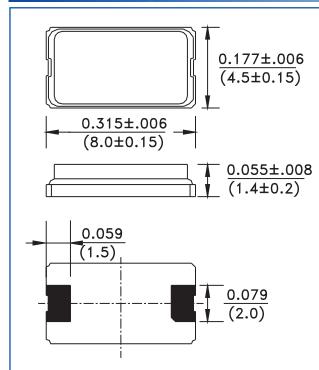
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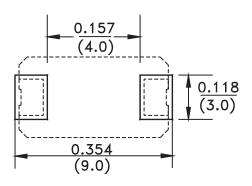
OUTLINE DRAWING:



CONNECTION



Recommended land pattern



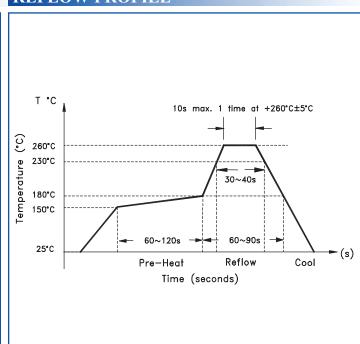
Note: Due to the availability of raw materials, the chamfer may not appear on the both pads. Be advised that this doesnot affect the electrical characteristics of the crystal in any way.

Dimension: Inches (mm)

TAPE & REEL: Tape and reel 1,000pcs/reel

FEEDING (PULL) DIRECTION Ø1.55±0.05 1.75±0.1 0.35±0.05 1.75±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1 91.55±0.1

REFLOW PROFILE





Need a test socket for the ABM2 Series? To view compatible PRECISION TEST & BURN-IN SOCKETS for these parts, click here.

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