ULTRA MINIATURE CERAMIC SMD CRYSTAL



3.2 x 2.5 x 0.8mm

ABM8

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

Pb RoHS Compliant

FEATURES:

- Low in height; suitable for thin equipment, 0.8mm max
- Seam sealed package assures high reliability
- Tight tolerance and stability available
- Suitable for RoHS reflow
- Available for fundamental and 3rd over tone mode

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	10.000	-----	125.000*	MHz	Contact Abracon for available F<11MHz
Operation Mode	Fundamental			-----	10MHz - 54MHz
	3rd Overtone (Standard Frequencies: 64, 66, 66.6666, 75, 80, 98.304, 100, 125MHz)			-----	64.000 MHz - 125.000 MHz Please contact Abracon for available frequencies
Operating Temperature	-10	-----	+60	ºC	See options
Storage Temperature	-55	-----	+125	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 (R1)	See table 1 below			Ω	
Shunt capacitance (C0)	-----	-----	7.0	pF	
Load capacitance (CL)	-----	18.0	-----	pF	Standard (See options if other than STD)
Drive Level	-----	10	100	µW	
Aging	-3	-----	+3	ppm	@25°C±3°C First year
Insulation Resistance	500	-----	-----	MΩ	@ 100Vdc ± 15V

TABLE 1- Standard ESR

Frequency (MHz)	ESR(Ω) max	Frequency (MHz)	ESR(Ω) max
10.000 -11.999 (Fund)	200	30.000 - 39.999 (Fund)	40
12.000 -15.999 (Fund)	120	40.000 - 54.000 (Fund)	35
16.000 -19.999 (Fund)	70	66.000 - 80.000 (3rd OT)	120
20.000 - 29.999 (Fund)	50	98.304 - 125.000 (3rd OT)	80

OPTIONS AND PART IDENTIFICATION: (Left blank if standard)

ABM8☐ - ☐☐☐☐ MHz - ☐ - ☐☐☐☐ - ☐☐☐ - ☐

Height (mm)
- Blank: 0.80±0.10
- 1: 0.65±0.05
- 2: 0.60±0.10

Frequency in MHz
Please specify the frequency in MHz. e.g. 16.000MHz

Load Capacitance (pF)
Please specify CL (min 6pF) in pF or S for series

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

** Frequency stability ± 50ppm and ± 100 ppm

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

(*) Option E, B, and -10°C to +60°C only.

Packaging
- Blank: Bulk
- T: 1kpcs / reel
- T2: 250pcs / reel
- T3: 3kpcs / reel

2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 08.19.15**
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Visit www.abracon.com for Terms and Conditions of Sale

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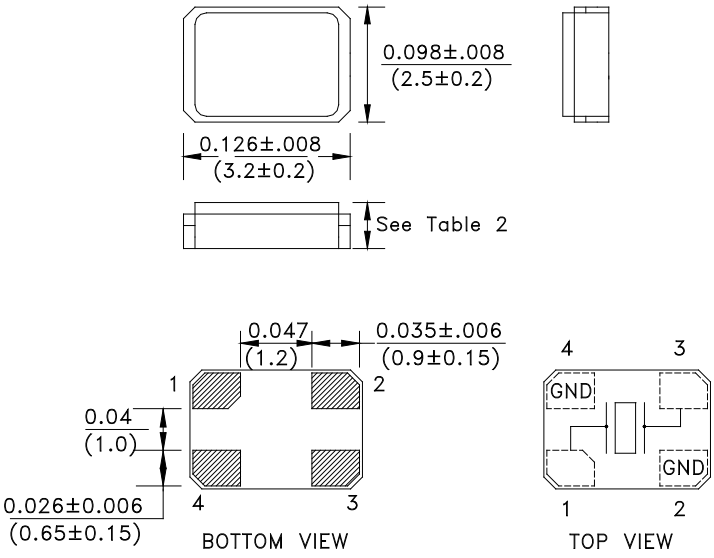


ABM8

RoHS Compliant

3.2 x 2.5 x 0.8mm

OUTLINE DRAWING:



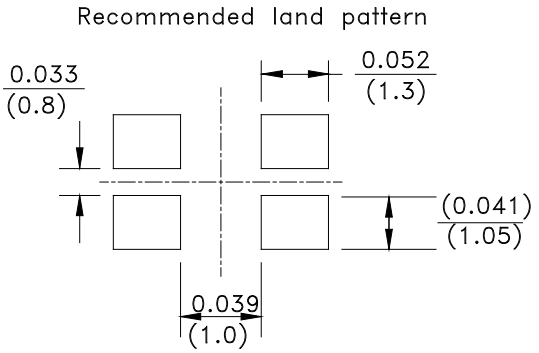


Table 2

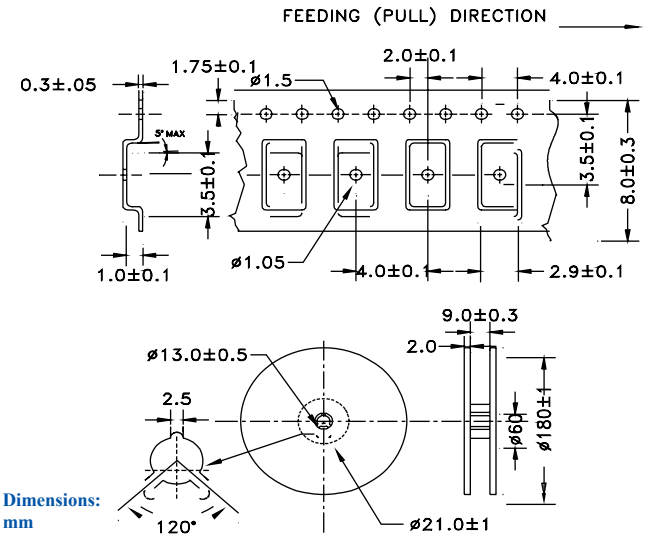
Height (mm)	
ABM8	0.80 max
ABM81	0.65+/-0.05
ABM82	0.60+/-0.10

Note: Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 4. Be advised that this does not affect the electrical characteristics of the crystal in any way.

Dimensions: inch (mm)

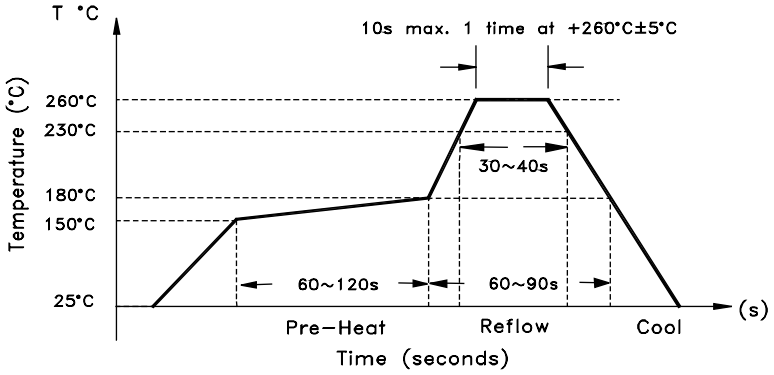
TAPE & REEL:

Option "-T" : Tape and reel (1,000pcs/reel) : ABM8, ABM82
Tape and reel (3,000pcs/reel) : ABM81
Option "-T2" : Tape and reel (250pcspcs/reel) : ABM8
Option "-T3" : Tape and reel (3,000pcs/reel) : ABM8, ABM82 only



Dimensions: mm

REFLOW PROFILE:





Need a test socket for the ABM8 Series? To view compatible PRECISION TEST & BURN-IN SOCKETS for these parts, click here.

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.