

ULTRA MINIATURE CERAMIC SMD CRYSTAL

ABM8

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



RoHS
Compliant



3.2 x 2.5 x 0.8mm

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

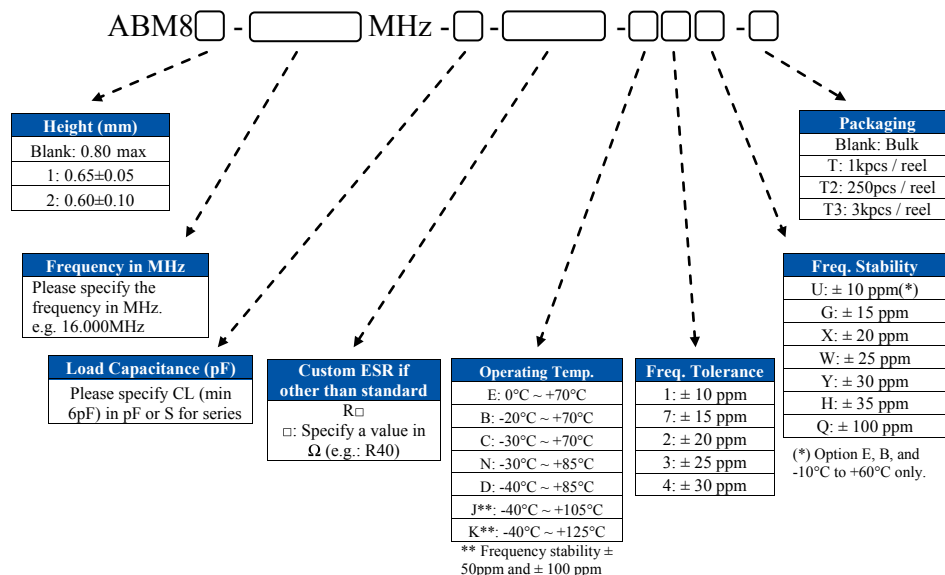
STANDARD SPECIFICATIONS:

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	°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 (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)



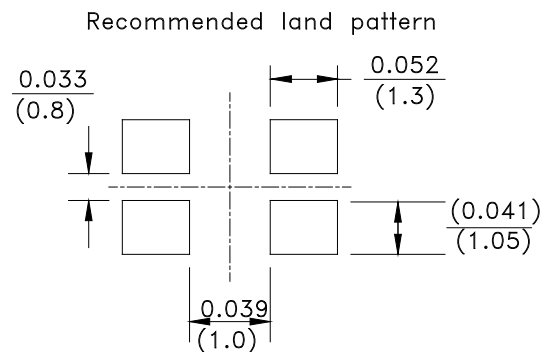
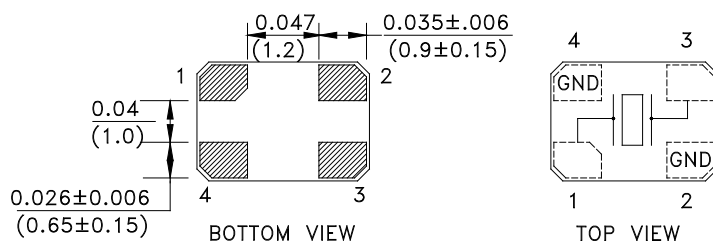
Pb

RoHS
Compliant

3.2 x 2.5 x 0.8mm

Technical drawing of a rectangular plate with dimensions and tolerances:

- Width: 0.126 ± 0.008 (tolerance 3.2 ± 0.2)
- Height: 0.098 ± 0.008 (tolerance 2.5 ± 0.2)
- Reference: See Table 2



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

Dimensions: inch (mm)

REFLOW PROFILE:

Technical drawing of a 100 nm pitch mask, showing dimensions in millimeters (mm) and nanometers (nm).

Top View Dimensions:

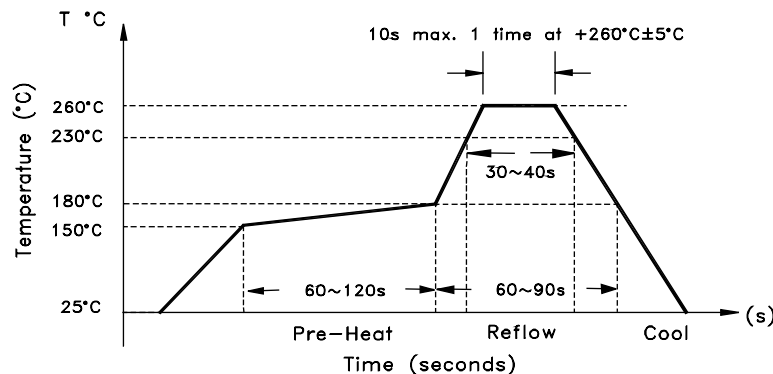
- Overall width: 8.0 ± 0.3 mm
- Overall height: 3.5 ± 0.1 mm
- Feature width: 1.75 ± 0.1 mm
- Feature height: 2.0 ± 0.1 mm
- Feature pitch: 4.0 ± 0.1 mm
- Feature diameter: $\phi 1.5$ mm
- Feature spacing: 4.0 ± 0.1 mm
- Feature offset: 2.9 ± 0.1 mm
- Feature diameter: $\phi 1.05$ mm
- Feature offset: 1.0 ± 0.1 mm
- Feature offset: 0.3 ± 0.05 mm
- Feature offset: 5° MAX

Bottom View Dimensions:

- Overall width: 9.0 ± 0.3 mm
- Overall height: 180 ± 1 mm
- Feature width: 2.5 mm
- Feature height: 2.0 mm
- Feature pitch: 2.0 mm
- Feature diameter: $\phi 13.0 \pm 0.5$ mm
- Feature diameter: $\phi 21.0 \pm 1$ mm
- Feature diameter: $\phi 60$ mm
- Feature diameter: $\phi 180 \pm 1$ mm
- Feature angle: 120°

Dimensions: nm

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.