

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

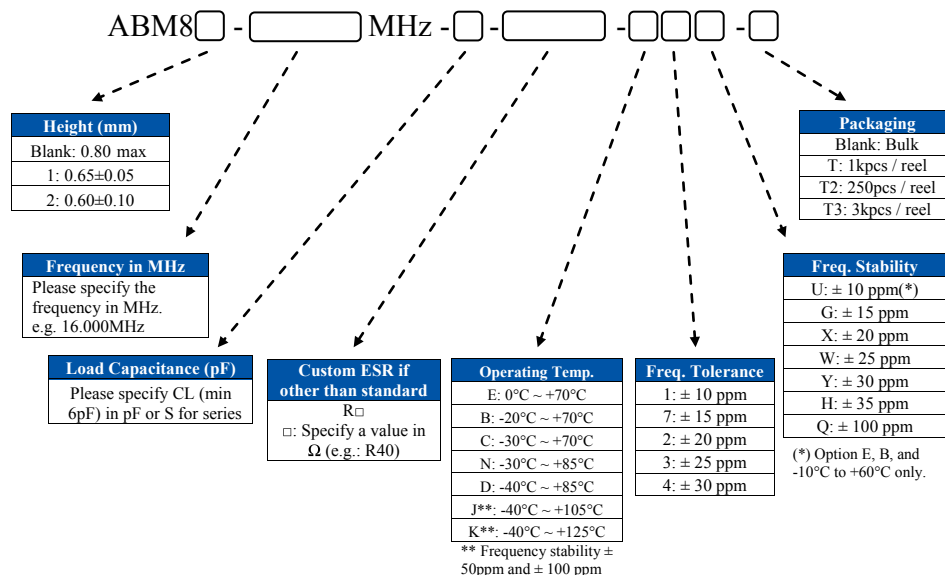
STANDARD SPECIFICATIONS:

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)



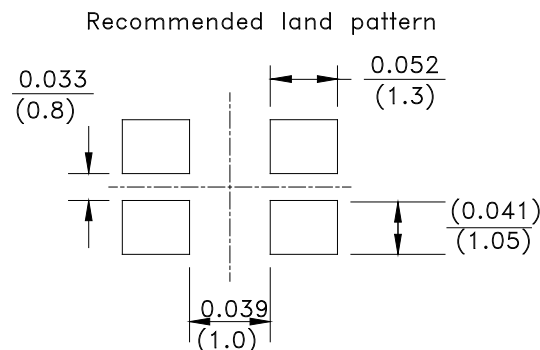
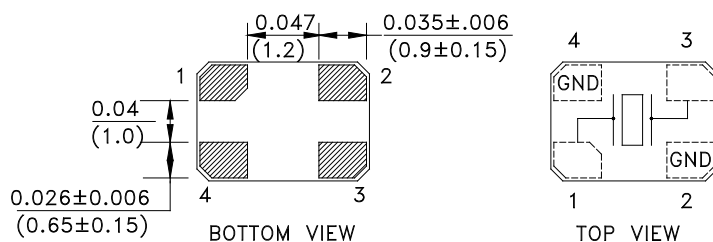
Pb

RoHS
Compliant

3.2 x 2.5 x 0.8mm

Technical drawing of a rectangular component with dimensions and tolerances:

- Top view: A rectangle with rounded corners. Dimensions: 0.098 ± 0.008 (height) and 0.126 ± 0.008 (width). Tolerances are indicated as (2.5 ± 0.2) and (3.2 ± 0.2) respectively.
- Side view: A rectangle with dimensions 0.098 ± 0.008 (height) and 0.126 ± 0.008 (width). Tolerances are indicated as (2.5 ± 0.2) and (3.2 ± 0.2) respectively.
- Bottom view: A rectangle with dimensions 0.098 ± 0.008 (height) and 0.126 ± 0.008 (width). Tolerances are indicated as (2.5 ± 0.2) and (3.2 ± 0.2) respectively.
- 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. The drawing includes a side view and a top view.

Side View Dimensions:

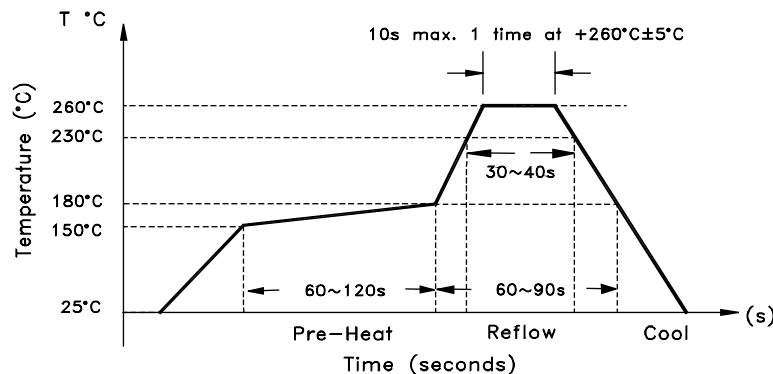
- Substrate thickness: 0.3 ± 0.05
- Chamfer angle: 5° MAX
- Opening width: 3.5 ± 0.1
- Feature width: 1.75 ± 0.1
- Feature height: 4.0 ± 0.1
- Pitch: 2.0 ± 0.1
- Total width: 8.0 ± 0.3
- Feature diameter: $\phi 1.5$
- Feature spacing: 4.0 ± 0.1
- Feature width: 2.9 ± 0.1

Top View Dimensions:

- Mask diameter: $\phi 13.0 \pm 0.5$
- Central hole diameter: $\phi 2.1 \pm 0.1$
- Opening width: 2.5
- Mask thickness: 9.0 ± 0.3
- Pitch: 2.0
- Mask width: $\phi 60$
- Mask height: $\phi 180 \pm 1$

Dimensions: nm

Dimensions:
mm



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