

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

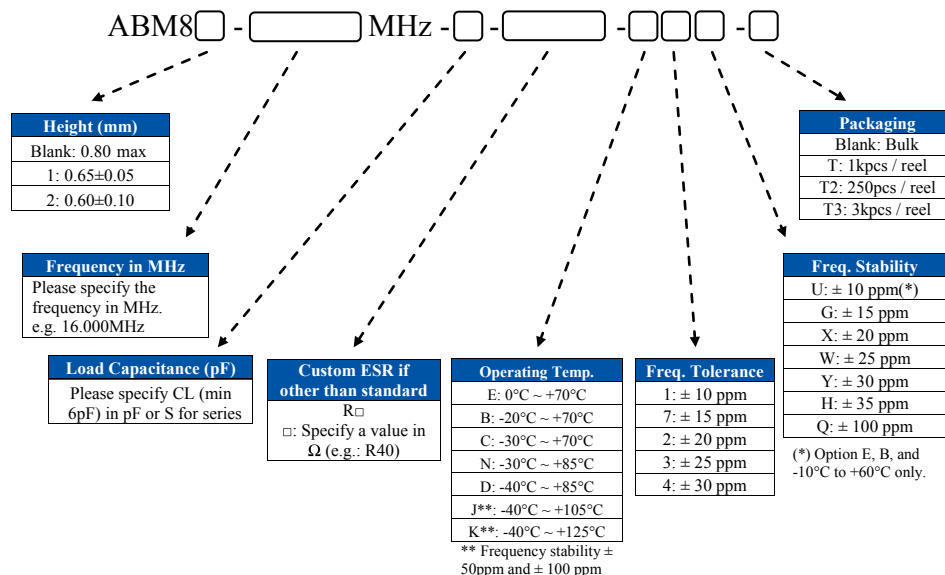
STANDARD SPECIFICATIONS:

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

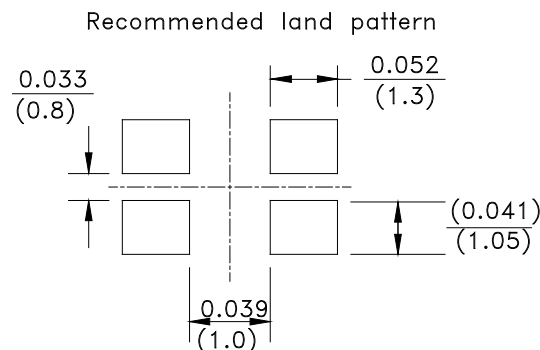
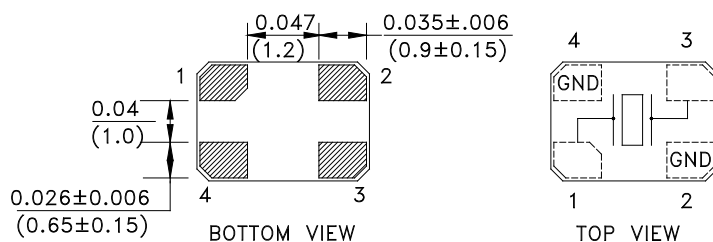
RoHS
Compliant

3.2 x 2.5 x 0.8mm

$\frac{0.126 \pm .008}{(3.2 \pm 0.2)}$

$\frac{0.098 \pm .008}{(2.5 \pm 0.2)}$

See Table 2



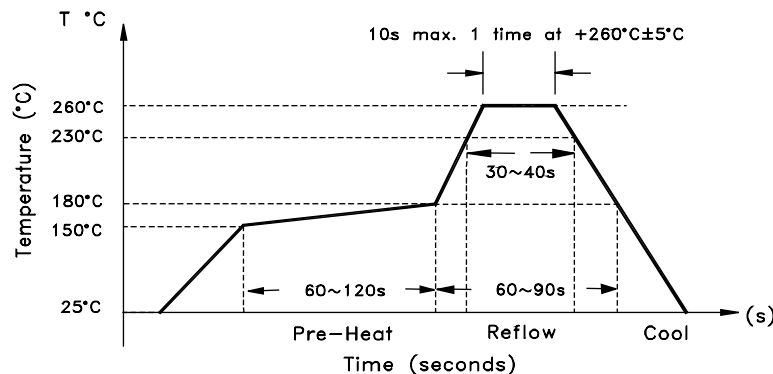
Height (mm)	
ABM8	0.80 max
ABM81	0.65+/-0.05
ABM82	0.60+/-0.10

Dimensions: inch (mm)

REFLOW PROFILE:

Technical drawing of a 100 nm pitch mask. The drawing includes a side view and a top view. The side view shows a series of rectangular features with dimensions: 0.3 ± 0.05, 1.75 ± 0.1, 2.0 ± 0.1, 4.0 ± 0.1, 3.5 ± 0.1, 8.0 ± 0.3, 3.5 ± 0.1, 4.0 ± 0.1, 2.9 ± 0.1, 1.0 ± 0.1, and 5° MAX. The top view shows a circular feature with dimensions: 13.0 ± 0.5, 2.5, 120°, 2.0, 9.0 ± 0.3, 60, 180 ± 1, and 21.0 ± 1. The drawing is labeled "FEEDING (PULL) DIRECTION".

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON:

[ABM8-18.432MHZ-B2-T](#) [ABM8-25.000MHZ-B2-T](#) [ABM8-28.63636MHZ-B2-T](#) [ABM8-33.000MHZ-B2-T](#) [ABM8-24.000MHZ-B2-T](#) [ABM8-44.000MHZ-B2-T](#) [ABM8-24.576MHZ-B2-T](#) [ABM8-16.000MHZ-B2-T](#) [ABM8-22.1184MHZ-B2-T](#) [ABM8-27.000MHZ-B2-T](#) [ABM8-29.4912MHZ-B2-T](#) [ABM8-48.000MHZ-B2-T](#) [ABM8-40.000MHZ-B2-T](#) [ABM8-30.000MHZ-B2-T](#) [ABM8-20.000MHZ-B2-T](#) [ABM8-28.375MHZ-B2-T](#) [ABM8-16.3676MHz-10-1-U-T](#) [ABM8-16.800MHZ-10-1-U-T](#) [ABM8-19.200MHZ-10-1-U-T](#) [ABM8-24.5535MHZ-10-1-U-T](#) [ABM8-26.000MHZ-10-1-U-T](#) [ABM8-13.000MHZ-10-1-U-T](#) [ABM8-14.7456MHZ-10-1-U-T](#) [ABM8-16.000MHZ-10-1-U-T](#) [ABM8-16.384MHZ-10-1-U-T](#) [ABM8-20.000MHZ-10-1-U-T](#) [ABM8-24.576MHZ-10-1-U-T](#) [ABM8-27.000MHZ-10-1-U-T](#) [ABM8-30.000MHZ-10-1-U-T](#) [ABM8-36.000MHZ-10-1-U-T](#) [ABM8-40.000MHZ-10-1-U-T](#) [ABM8-27.0000MHZ-10-B1-U-T](#) [ABM8-14.31818MHz-B2-T](#) [ABM8-16.384MHz-B2-T](#) [ABM8-13.000MHz-B2-T](#) [ABM8-32.000MHz-B2-T](#) [ABM8-12.000MHz-B2-T](#) [ABM8-156-20.000MHZ-T](#) [ABM8-32.000MHZ-10-1-U](#) [ABM81-25.000MHz-10-B1U-T3](#) [ABM81-27.120MHz-10-B1U-T3](#) [ABM81-14.31818MHz-B4Y-T3](#) [ABM81-30.000MHz-10-D1U-T3](#) [ABM81-36.000MHz-B4Y-T3](#) [ABM81-25.000MHz-B4Y-T3](#) [ABM81-32.000MHz-10-B1U-T3](#) [ABM81-16.000MHz-10-B1U-T3](#) [ABM81-24.000MHz-10-B1U-T3](#) [ABM81-48.000MHz-B4Y-T3](#) [ABM81-16.934MHz-B4Y-T3](#) [ABM81-26.000MHz-B4Y-T3](#) [ABM81-24.000MHz-B4Y-T3](#) [ABM81-40.000MHz-B4Y-T3](#) [ABM81-20.000MHz-B4Y-T3](#) [ABM81-38.400MHz-B4Y-T3](#) [ABM81-30.000MHz-B4Y-T3](#) [ABM81-12.000MHz-10-B1U-T3](#) [ABM81-24.576MHz-B4Y-T3](#) [ABM81-27.000MHz-B4Y-T3](#) [ABM81-19.200MHz-B4Y-T3](#) [ABM81-32.000MHz-B4Y-T3](#) [ABM81-16.000MHz-B4Y-T3](#) [ABM8-12.000-B2-T3](#) [ABM8-13.000-B2-T3](#) [ABM8-18.432-B2-T3](#) [ABM8-16.000-B2-T3](#) [ABM8-28.63636-B2-T3](#) [ABM8-32.000-B2-T3](#) [ABM8-44.000-B2-T3](#) [ABM8-30.000-B2-T3](#) [ABM8-12.288-B2-T3](#) [ABM8-14.31818-B2-T3](#) [ABM8-20.000-B2-T3](#) [ABM8-24.000-R60-D-1-W-T3](#) [ABM8-25.000-B2-T3](#) [ABM8-27.000-B2-T3](#) [ABM8-48.000-B2-T3](#) [ABM8-22.1184-B2-T3](#) [ABM8-19.200-B2-T3](#) [ABM8-29.4912-B2-T3](#) [ABM8-24.576-B2-T3](#) [ABM8-16.384-B2-T3](#) [ABM8-40.000-B2-T3](#) [ABM8-33.000-B2-T3](#) [ABM8-24.000-B2-T3](#) [ABM8-28.375-B2-T3](#) [ABM8-166-114.285MHZ-T2](#) [ABM8-24.000MHZ-R60-D-1-W-T](#) [ABM8-24.000MHZ-B2-T3](#) [ABM8-28.63636MHZ-B2-T3](#) [ABM8-32.000MHZ-B2-T3](#) [ABM8-37.500MHZ-12-1-U-T](#) [ABM8-18.080MHZ-10-R60-E-1-U-T](#) [ABM8-12.288MHZ-B2-T](#) [ABM8-19.200MHZ-B2-T](#) [ABM8-24.000MHZ-D2-T](#) [ABM8-25.000MHZ-D2Y-T](#) [ABM8-25.000MHZ-10-D1G-T](#) [ABM8-14.31818MHZ-D2Y-T](#) [ABM8-16.000MHZ-7-1-U-T](#)