# **ULTRA MINIATURE CERAMIC SMD CRYSTAL**



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





ABM8



- 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

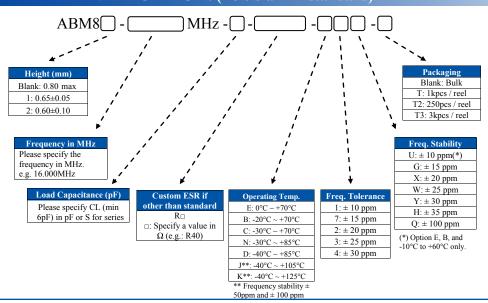
#### STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	10.000		125.000*	MHz	Contact Abracon for available F<11MHz
	Fundamental				10MHz - 54MHz
Operation Mode	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			ΜΩ	@ $100 \text{Vdc} \pm 15 \text{V}$

**TABLE 1- Standard ESR** 

	$\mathrm{ESR}(\Omega)$		$\mathrm{ESR}(\Omega)$
Frequency (MHz)	max	Frequency (MHz)	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)



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ABRACON IS ISO9001-2015 CERTIFIED

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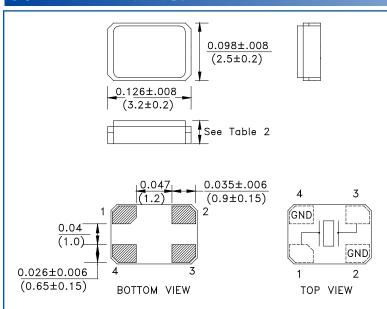




3.2 x 2.5 x 0.8mm

Dimensions: inch (mm)

#### **OUTLINE DRAWING:**



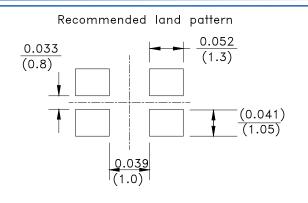


 Table 2

 Height (mm)

 ABM8
 0.80 max

 ABM81
 0.65+/-0.05

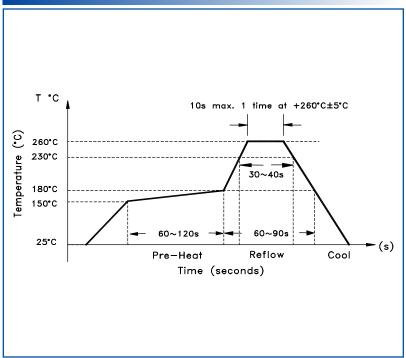
 ABM82
 0.60+/-0.10

**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.

#### **► TAPE & REEL:**

## 

### **REFLOW PROFILE:**





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.



CERTIFIED

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#### 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