# **CERAMIC SMD CRYSTAL**



3.2 x 2.5 x 0.8mm

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

### > APPLICATIONS:

- High density applications
- Modems, communication and test equipment

RoHS

Compliant

• PMCIA, Wireless applications

Pb

### **STANDARD SPECIFICATIONS:**

· Seam sealed package assures high reliability

• Tight tolerance and stability available

ABM8

• Suitable for RoHS reflow

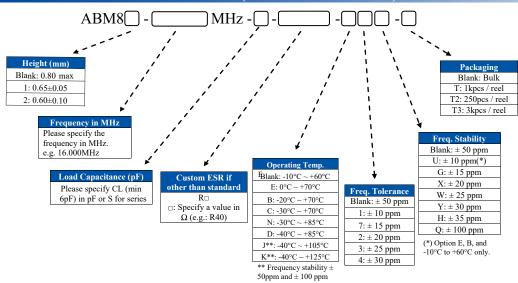
**FEATURES:** 

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	8.000		125.000*	MHz	Contact Abracon for available F<10MHz
	Fundamental				8MHz - 54MHz
Operation Mode	3rd Overtone (Standard Frequencies: 64, 66, 66.6666, 75, 80, 98.304, 100, 125MHz)			64MHz - 125MHz Please contact Abracon for available frequencies	
Operating Temperature	-10		+60	°C	Standard (see options if other than STD)
Storage Temperature	-55		+125	°C	
Frequency Tolerance @+25°C	-50		+50	ppm	Standard (see options if other than STD)
Frequency Stability over the Operating Temperature (ref. to +25°C)	-50		+50	ppm	Standard (see options if other than STD)
Equivalent series resistance (R1)	See table 1 below		Ω		
Shunt capacitance (C0)			3.0	pF	
Load capacitance (CL)		18.0		pF	Standard (See options if other than STD)
Drive Level		10	100	μW	
Aging	-2		+2	ppm	@25°C±3°C First year
Insulation Resistance	500			MΩ	(a) $100$ Vdc $\pm 15$ V

#### **TABLE 1- Standard ESR**

	$ESR(\Omega)$		$\text{ESR}(\Omega)$
Frequency (MHz)	max	Frequency (MHz)	max
8.000-9.999 (Fund)	400	30.000 - 39.999 (Fund)	40
10.000 -11.999 (Fund)	200	40.000 - 54.000 (Fund)	35
12.000 -15.999 (Fund)	120	64.000 - 80.000 (3rd OT)	120
16.000 -19.999 (Fund)	70	98.304 - 125.000 (3rd OT)	80
20.000 - 29.999 (Fund)	50		

### **OPTIONS AND PART IDENTIFICATION:** (Left blank if standard)





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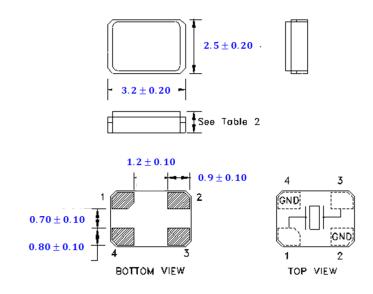
**REVISED: 07-29-20** 

ABRACON IS ISO9001-2015 CERTIFIED

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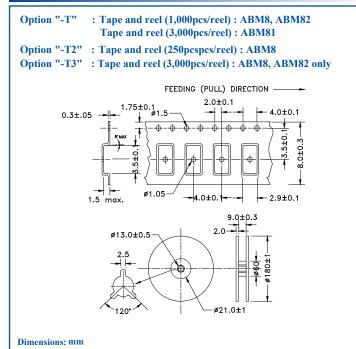
## ABM8

### **OUTLINE DRAWING:**



**Note:** Due to material availability, the chamfer could be located on pin #1, 3, or 4. Be advised that the chamfer location has no impact on the electrical performance of the device.

#### **▷** TAPE & REEL:



### 

**REFLOW PROFILE:** 

Zone	Description	Temperature	Time
1	Preheat	$\begin{array}{l} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 180^{\circ}C \end{array}$	$60 \sim 120$ sec.
2	Reflow	T <sub>L</sub> 230°C	$30 \sim 40$ sec.
3	Peak heat	Т <sub>Р</sub> 260°С±5°С	10 sec. MAX

ATTENTION: Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.



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**Recommended land pattern** (0.7) (1.05) (1.05) (1.05)

ABM8

Table 2				
Height (mm)				
0.80 max				
0.65+/-0.05				
0.60+/-0.10				

Dimensions: mm