CERAMIC SMD CRYSTAL



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





ABM8



- Seam sealed package assures high reliability
- Tight tolerance and stability available
- Suitable for RoHS reflow

> APPLICATIONS:

- High density applications
- Modems, communication and test equipment
- PMCIA, Wireless applications

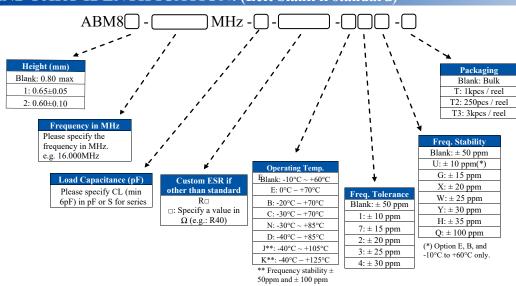
STANDARD SPECIFICATIONS:

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			$M\Omega$	$ @ 100 \text{Vdc} \pm 15 \text{V} $

TABLE 1- Standard ESR

	$\mathrm{ESR}(\Omega)$		$\mathrm{ESR}(\Omega)$
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)





5101 Hidden Creek Ln Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858 For terms and conditions of sales, please visit: www.abracon.com

REVISED: 07-29-20

ABRACON IS ISO9001-2015 CERTIFIED

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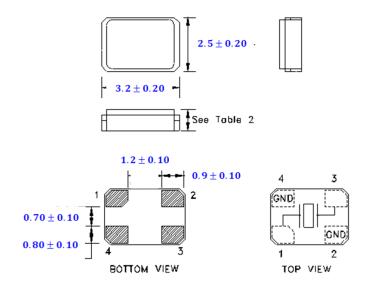






3.2 x 2.5 x 0.8mm

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.

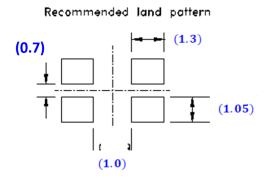


 Table 2

 Height (mm)

 ABM8
 0.80 max

 ABM81
 0.65+/-0.05

 ABM82
 0.60+/-0.10

Dimensions: mm

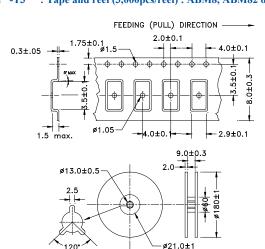
► TAPE & REEL:

Dimensions: mm

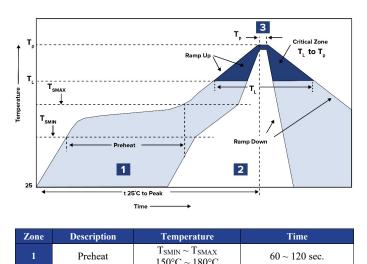
Option "-T" : Tape and reel (1,000pcs/reel) : ABM8, ABM82 Tape and reel (3,000pcs/reel) : ABM81

Option "-T2" : Tape and reel (250pcspcs/reel) : ABM8

Option "-T3" : Tape and reel (3,000pcs/reel) : ABM8, ABM82 only



REFLOW PROFILE:



Zone	Description	Temperature	Time
1	Preheat	$\begin{split} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 180^{\circ}C \end{split}$	60 ∼ 120 sec.
2	Reflow	T _L 230°C	$30 \sim 40$ sec.
3	Peak heat	T _P 260°C±5°C	10 sec. MAX

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