

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 0.7mm

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
- PCMCIA, Wireless applications

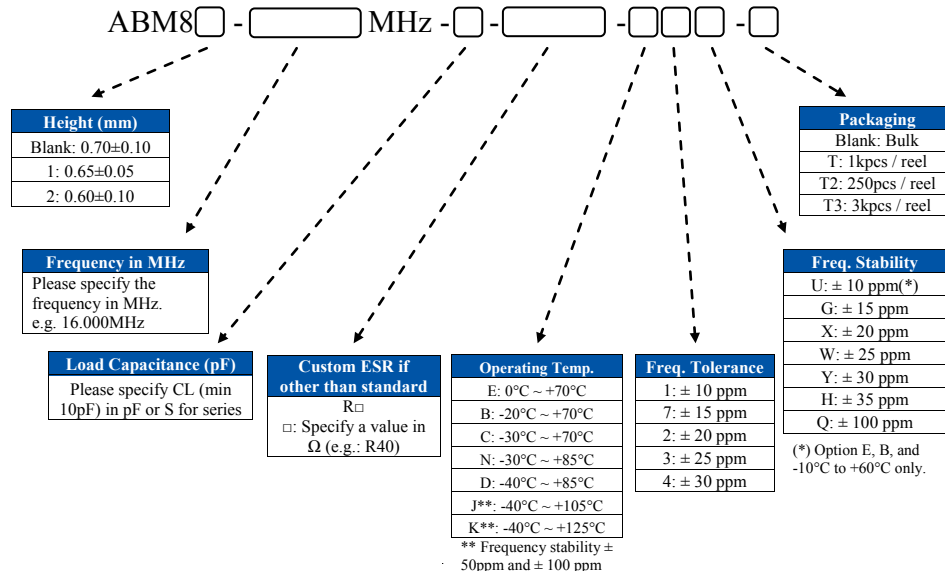
STANDARD SPECIFICATIONS:

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

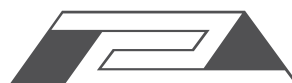
TABLE 1- Standard ESR

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)



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3.2 x 2.5 x 0.7mm

ABM8



OUTLINE DRAWING:

0.098±.008
(2.5±0.2)

0.126±.008
(3.2±0.2)

See Table 2

0.047
(1.2)

0.035±.006
(0.9±0.15)

0.04
(1.0)

0.026±.006
(0.65±0.15)

1 2 3 4

GND GND

1 2

Recommended land pattern

0.033
(0.8)

0.052
(1.3)

0.039
(1.0)

(0.041)
(1.05)

Table 2

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

Dimensions: inch (mm)

TAPE & REEL:

- 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:

FEEDING (PULL) DIRECTION →

0.3±.05

1.75±0.1

2.0±0.1

4.0±0.1

3.5±0.1

8.0±0.3

1.0±0.1

3.5±0.1

1.0±0.1

4.0±0.1

2.9±0.1

9.0±0.3

2.0

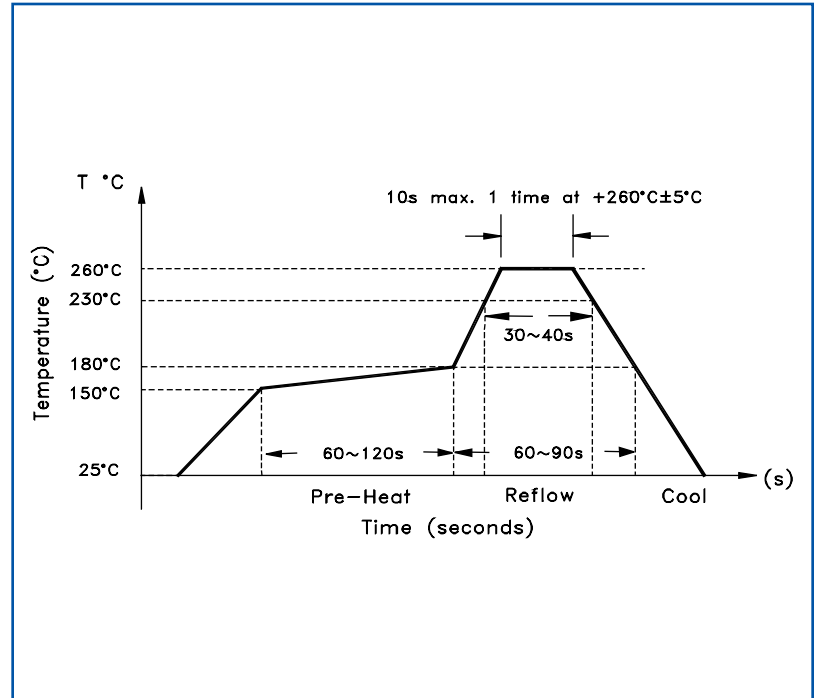
120°

2.5

13.0±0.5

21.0±1

Dimensions: mm



Need a test socket for the ABM8 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#).

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