

ULTRA MINIATURE CERAMIC SMD CRYSTAL



ABM8

3.2 x 2.5 x 0.7mm

ABM8



RoHS
Compliant

➤ **FEATURES:**

- Low in height; suitable for thin equipment, 0.7mm 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:**

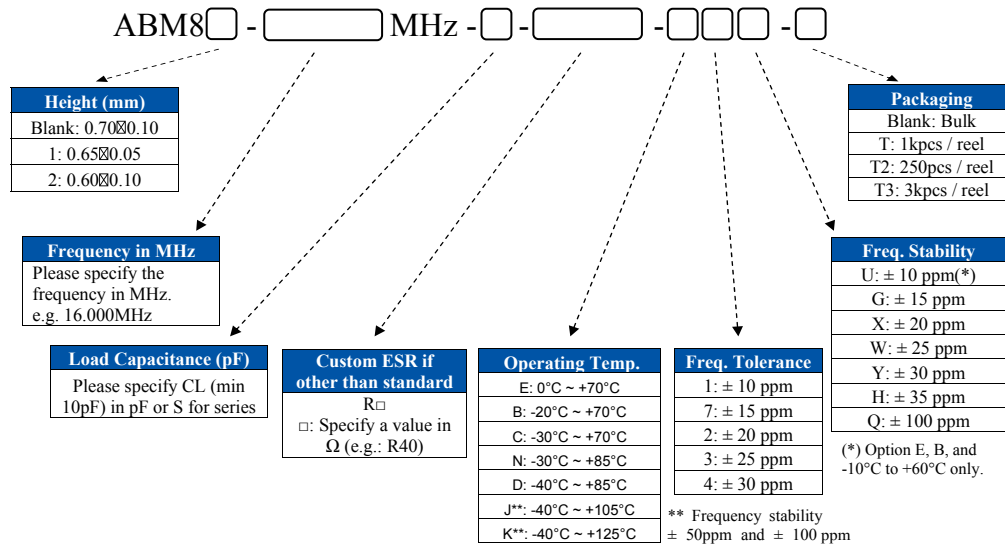
Key Electrical Specifications

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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OUTLINE DRAWING:

Dimensions:
 Width: 0.126 ± 0.008 (3.2 ± 0.2)
 Height: 0.098 ± 0.008 (2.5 ± 0.2)
 See Table 2

Recommended land pattern
 Pin 1 width: 0.033 (0.8)
 Pin 2 width: 0.052 (1.3)
 Pin 3 width: 0.041 (1.05)
 Pin 4 width: 0.039 (1.0)

Chamfer on PIN 4 (Default)
 BOTTOM VIEW: Shows chamfer on pins 1 and 2.
 TOP VIEW: Shows GND connections and pin layout.

Chamfer on PIN 1 (See Note)
 BOTTOM VIEW: Shows chamfer on pins 3 and 4.
 TOP VIEW: Shows GND connections and pin layout.

Table 2

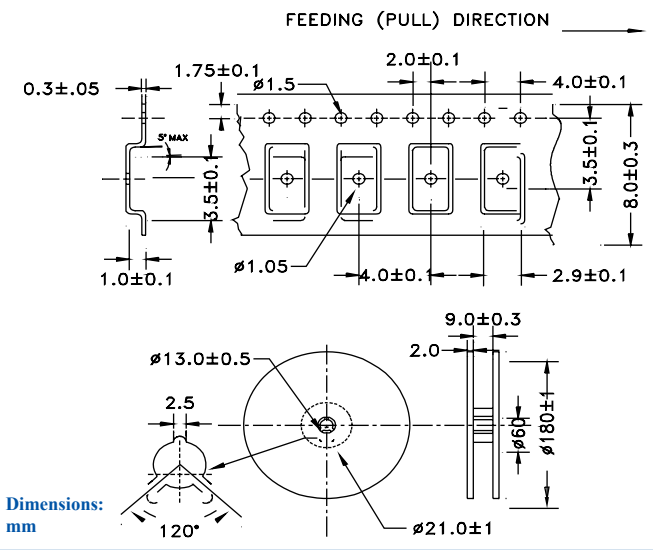
	Height (mm)	Chamfer PIN #
ABM8	0.70+/-0.10	#4 (Default), #1 (See Note)
ABM81	0.65+/-0.05	#1 only
ABM82	0.60+/-0.10	#4 (Default), #1 (See Note)

Note: Due to the availability of raw materials, this part may be manufactured with the chamfer on pin 1. Be advised that this does not affect the electrical characteristics of the crystal in any way.

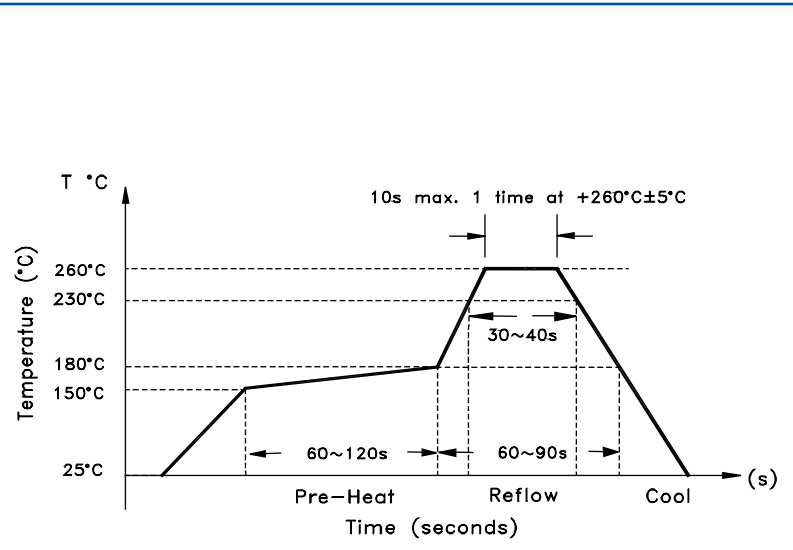
Dimensions: inch (mm)

TAPE & REEL:

- Option "-T" : Tape and reel (1,000pcs/reel) : ABM8, ABM82
Tape and reel (3,000pcs/reel) : ABM81, ABM83
- Option "-T2" : Tape and reel (250pcspcs/reel) : ABM8
- Option "-T3" : Tape and reel (3,000pcs/reel) : ABM8, ABM82 only



REFLOW PROFILE:



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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