

# CERAMIC SMD ULTRA MINIATURE QUARTZ CRYSTAL



2.5 x 2.0 x 0.5 mm

**ABM10**

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable **Pb** | RoHS/RoHS II Compliant

## FEATURES:

- 2.5 x 2.0 x 0.5mm ultra miniature package
- Suitable for RoHS reflow profile
- Tight stability available  $\pm 10$ ppm over -10 to +60°C
- Seam sealed ceramic package assures high precision and reliability

## APPLICATIONS:

- Blue-tooth, Wireless applications
- Computers, Modems, Microprocessors
- Communication, Test equipment
- High density applications
- PCMCIA
- Portable radios and MP3 players

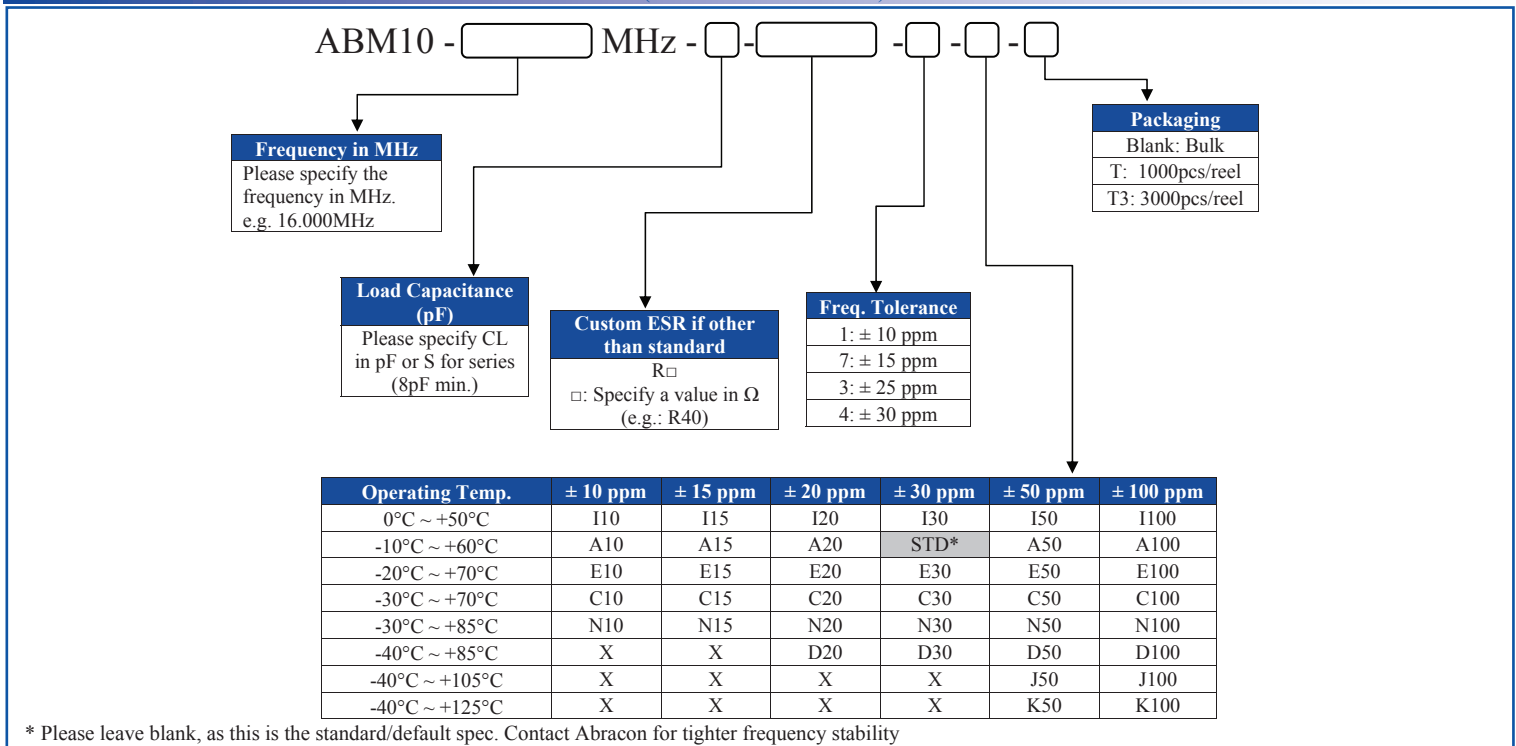
## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	12.000		55.000	MHz	Fundamental
Operation Mode	Fundamental				
Operating Temperature	-10		+60	°C	See options
Storage Temperature	-40		+125	°C	
Frequency Tolerance @+25°C			$\pm 20$	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)			$\pm 30$	ppm	See options
Equivalent series resistance (R1)	See table 1 below				
Shunt capacitance (C0)			7	pF	
Load capacitance (CL)	10			pF	Standard (See options if other than STD)
Drive Level		10	100	$\mu$ W	
Aging@25°C $\pm 3$ °C			$\pm 5$	ppm	First year
Insulation Resistance	500			M $\Omega$	@ 100Vdc $\pm 15$ V

Table 1 – standard ESR

Frequency (MHz)	ESR( $\Omega$ ) max.
12.000 – 15.999	250
16.000 – 19.999	150
20.000 – 29.999	100
30.000 – 55.000	70

## OPTIONS & PART IDENTIFICATION: (Left blank if standard)



\* Please leave blank, as this is the standard/default spec. Contact Abracon for tighter frequency stability

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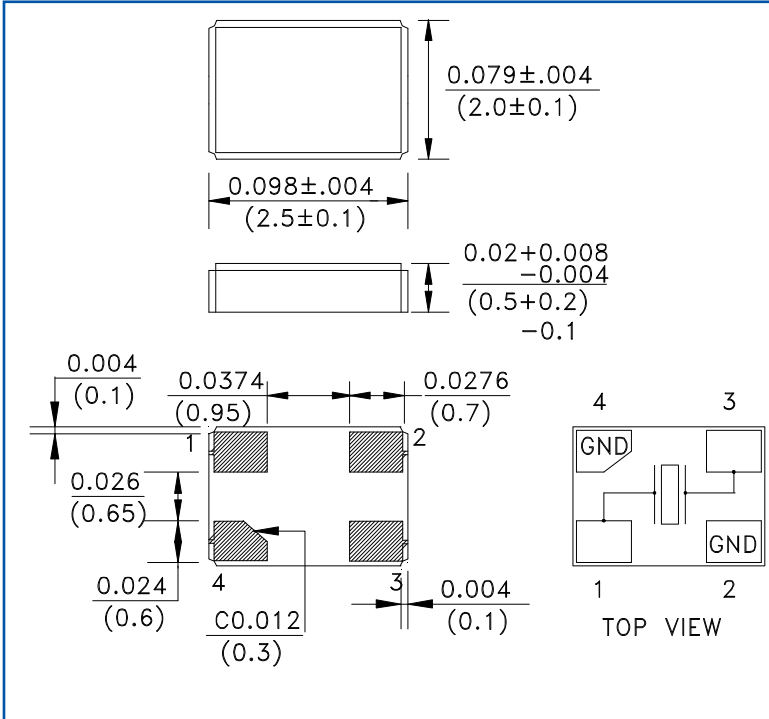
ABM10

2.5 x 2.0 x 0.5 mm

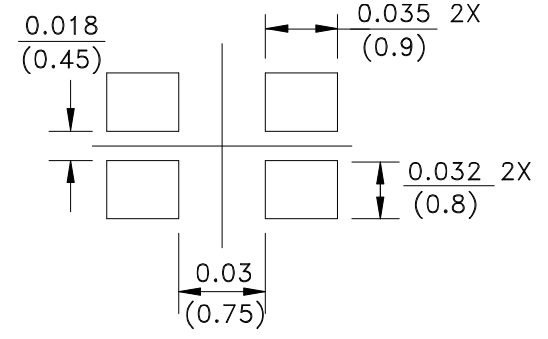
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RoHS/RoHS II Compliant

## OUTLINE DRAWING:



## Recommended land pattern

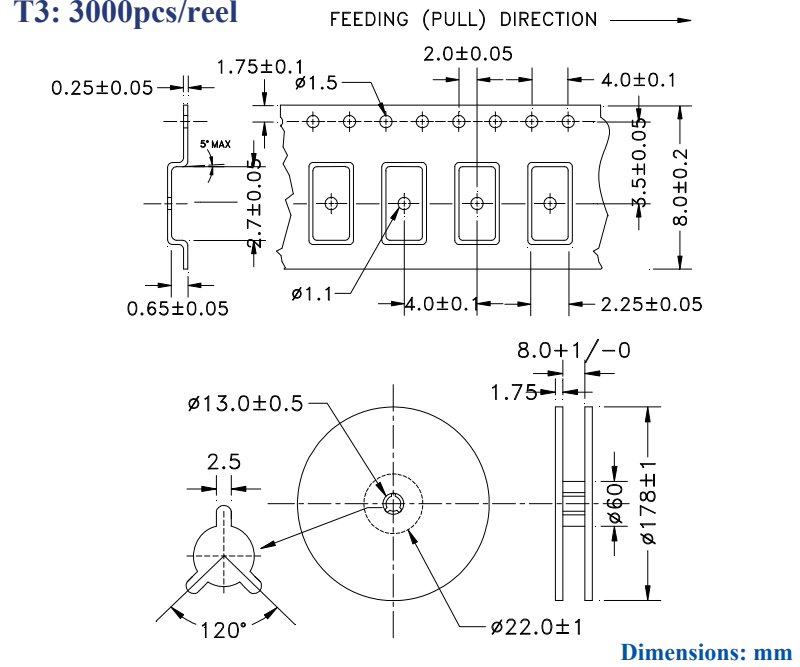


**Note:** From the top view (marking side), pin #1 is always located at the bottom left corner of the package. This is regardless of the location of the Chamfer, since due to material availability, the Chamfer could be located on pin#1, 2 or 4. Be advised that the Chamfer location has no impact on the electrical performance of the device.

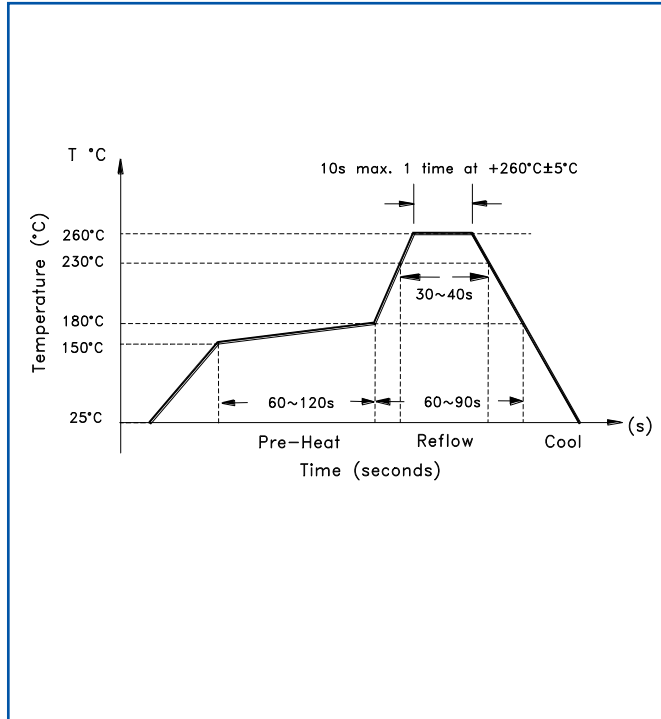
**Dimensions: inches (mm)**

## TAPE & REEL:

T: 1000pcs/reel  
T3: 3000pcs/reel



## REFLOW PROFILE:



Need a test socket for the ABM10 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N: AXS-2520-04-10

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