# CERAMIC SMD ULTRA MINIATURE QUARTZ CRYSTAL

ABM10

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





2.5 x 2.0 x 0.5 mm

### **FEATURES:**

- 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 PCMCIA
- Computers, Modems, Microprocessors
   Communication, Test equipment
- Portable radios and MP3 players

• High density applications

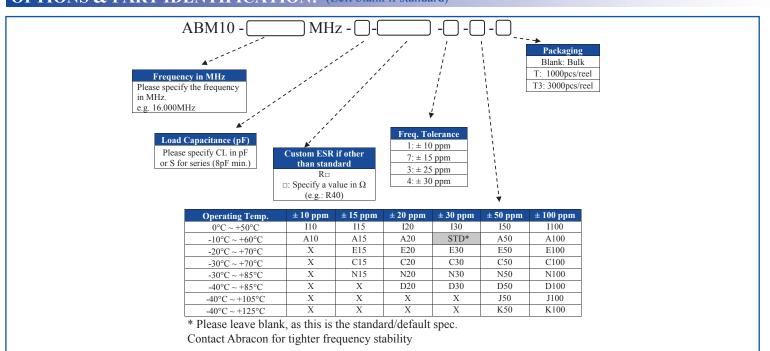
### **STANDARD SPECIFICATIONS:**

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			±20	ppm	See options
Frequency Stability over the Operating Temperature ( ref. to +25°C)			±30	ppm	See options
Equivalent series resistance (R1)	See table 1 below		Ω		
Shunt capacitance (C0)			7	pF	
Load capacitance (CL)	10		pF	Standard (See options if other than STD)	
Drive Level		10	100	μW	
Aging@25°C±3°C			±5	ppm	First year
Insulation Resistance	500			ΜΩ	@ $100 \text{Vdc} \pm 15 \text{V}$

### 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)



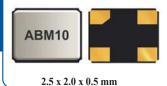




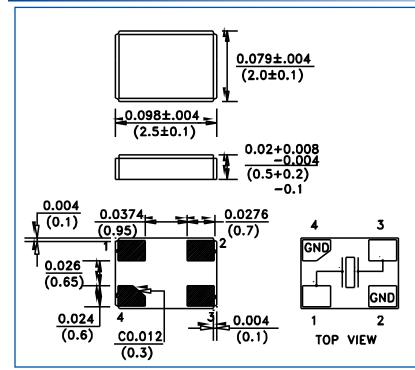
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### **OUTLINE DRAWING:**

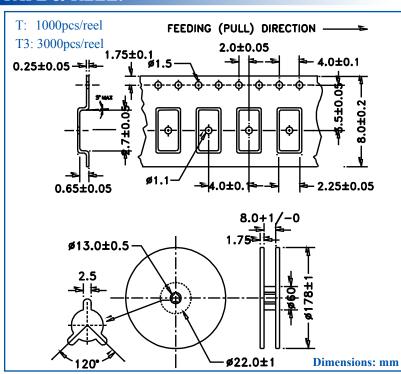


# Recommended land pattern 0.018 (0.45) (0.9) 0.032 2X 0.032 (0.75)

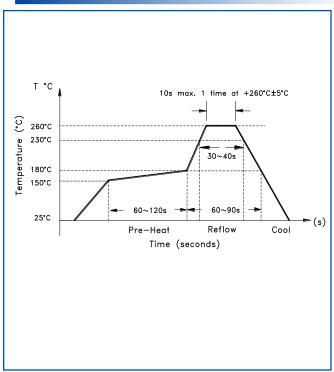
**Note**: Due to the availability of raw materials, the chamfer location may vary (Pin 1, 2 or 4). Be advised that this does not affect the electrical characteristics of the crystal in any way.

**Dimensions: inches (mm)** 

# **TAPE & 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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**Authorized Distributor** 

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### ABRACON:

ABM10-48.000MHZ-E20-T ABM10-20.000MHZ-E20-T ABM10-40.000MHZ-E20-T ABM10-27.000MHZ-E20-T ABM10-30.000MHZ-E20-T ABM10-25.000MHZ-E20-T ABM10-24.000MHZ-E20-T ABM10-22.1184MHZ-E20-T ABM10-24.576MHZ-E20-T ABM10-24.000MHZ-8-7A15-T ABM10-28.63636MHZ-8-7A15-T ABM10-32.000MHZ-8-7A15-T ABM10-26.000MHZ-7-A15-T ABM10-32.000MHZ-7-A15-T ABM10-40.000MHZ-8-7A15-T ABM10-18.432MHZ-E20-T ABM10-16.384MHZ-E20-T ABM10-16.000MHZ-E20-T ABM10-16.3676MHZ-D30-T3 ABM10-16.3676MHZ-D30-T3 ABM10-16.384MHZ-D30-T3 ABM10-18.432MHZ-D30-T3 ABM10-19.200MHZ-D30-T3 ABM10-20.000MHZ-D30-T3 ABM10-22.1184MHZ-D30-T3 ABM10-24.000MHZ-D30-T3 ABM10-25.000MHZ-D30-T3 ABM10-26.000MHZ-D30-T3 ABM10-27.000MHZ-D30-T3 ABM10-30.000MHZ-D30-T3 ABM10-30.000MHZ-D30-T3 ABM10-40.000MHZ-D30-T3 ABM10-40.000MHZ-D3