

# ULTRA MINIATURE CERAMIC PACKAGE HIGH STABILITY SMD CRYSTAL

ABM3X



5.0 x 3.2 x 0.9mm

**ABM3X**



**RoHS  
Compliant**

## FEATURES:

- -40°C to +125°C wide operating temperature range
- ±40 ppm Max. All Inclusive frequency stability over 10-year product life
- Fundamental Mode, low ESR Quartz design
- Ultra miniature, Seam-Sealed, RoHS compliant reflow-able package

## APPLICATIONS:

- Zigbee based designs for indoor / outdoor applications
- Wireless Sensor Networks
- Industrial Control
- Home and Building Automation
- Consumer Electronics
- PC Peripherals

## STANDARD SPECIFICATIONS

| Parameters  | Minimum     | Typical          | Maximum | Units | Notes            |
|---|-------------|------------------|---------|-------|------------------|
| Center Frequency  | -----       | 24.000<br>32.000 | -----   | MHz   |                  |
| Operation Mode  | Fundamental |                  |         |       |                  |
| Operating Temperature   | -40         | -----            | +125    | °C    |                  |
| Storage Temperature   | -55         | -----            | +155    | °C    |                  |
| Overall Frequency Stability (All inclusive)                               | -40         | -----            | +40     | ppm   |                  |
| Frequency Tolerance   | -10         | -----            | +10     | ppm   |                  |
| Frequency Stability over the Operating Temperature Range ( ref. to +25°C) | -25         | -----            | +25     | ppm   |                  |
| Aging   | -5          | -----            | +5      | ppm   | @25±3°C 10 years |
| Equivalent series resistance (R1)   | -----       | -----            | 30      | Ω     |                  |
| Shunt capacitance (C0)  | -----       | -----            | 3.5     | pF    |                  |
| Motional capacitance (C1)   | -----       | 4.5              | -----   | fF    |                  |
| Load capacitance (CL)   | -----       | 10               | -----   | pF    |                  |
| Drive Level   | 50          | -----            | 100     | μW    |                  |
| Insulation Resistance   | 500         | -----            | -----   | MΩ    | @100Vdc±15V      |

## OPTIONS AND PART IDENTIFICATION:

ABM3X -  MHz -

| Frequency in MHz          |
|---------------------------|
| 24.000MHz or<br>32.000MHz |

| Packaging       |
|-----------------|
| Blank: Bulk     |
| T: 1kpcs / reel |

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ABM3X



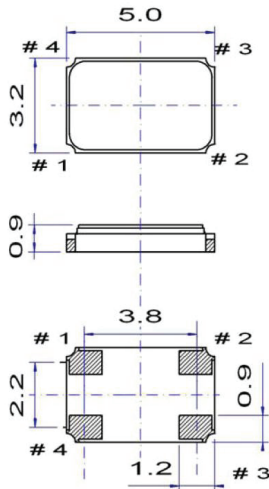
5.0 x 3.2 x 0.9mm

ABM3X



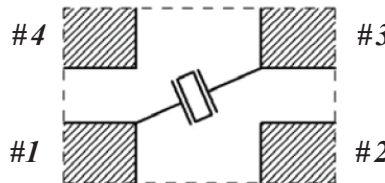
RoHS  
Compliant

## OUTLINE DIMENSIONS:

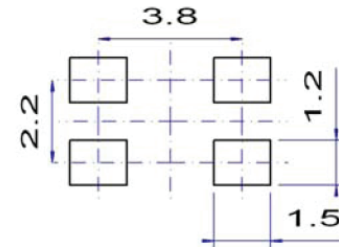


### Pin function

- # 1 crystal connection
- # 2 GND
- # 3 crystal connection
- # 4 GND



### Example for solder pattern

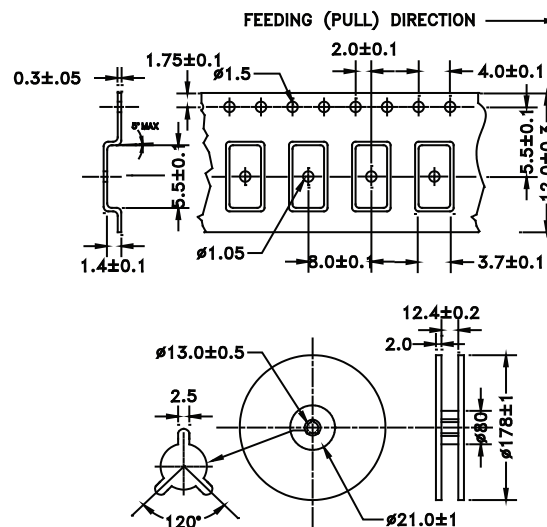


Do not design any conductive path between the pattern

Dimensions: mm

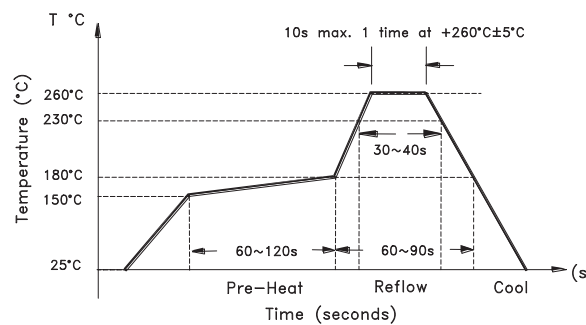
## TAPE & REEL:

1000pcs/reel



Dimensions: mm

## REFLOW PROFILE:



Need a test socket for the ABM3X Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N **AXS-5032-04-07**

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