

ULTRA MINIATURE CERAMIC PACKAGE HIGH STABILITY SMD CRYSTAL



3.2 x 2.5 x 0.6mm

ABM8X

RoHS/RoHS II Compliant

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

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

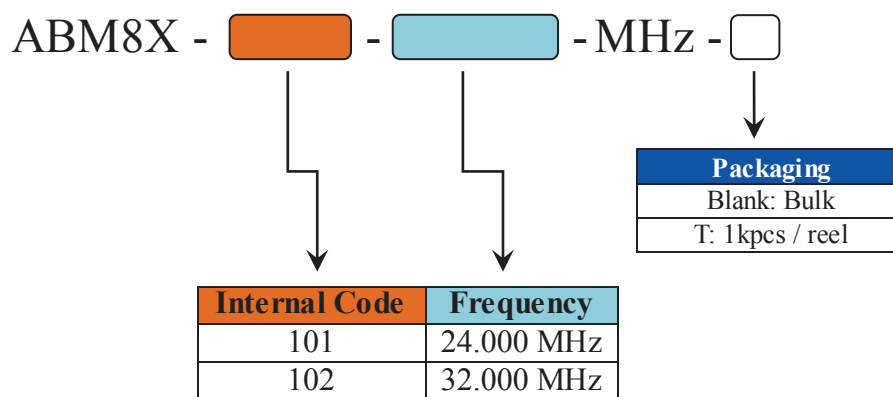
APPLICATIONS:

- 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 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) | | | 60 | Ω | |
| Shunt capacitance (C0) | | | 2.5 | pF | |
| Motional capacitance (C1) | | 2.0 | | fF | |
| Load capacitance (CL) | | 10 | | pF | |
| Drive Level | | 50 | 100 | μW | |
| Insulation Resistance | 500 | | | MΩ | @100Vdc±15V |

Options and Part Identification (left blank if standard)



Example Part #: ABM8X-101-24.000MHz-T

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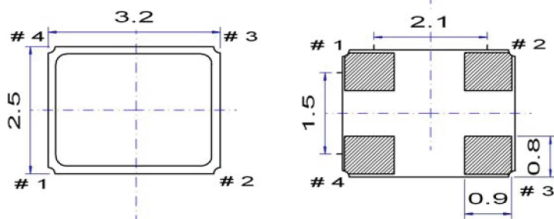
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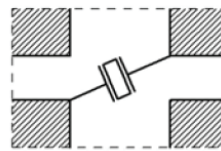
OUTLINE DIMENSIONS:



Pin function

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

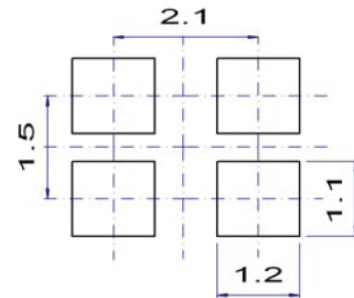
Top view



Pad #2 & #4 connected with the metal cap

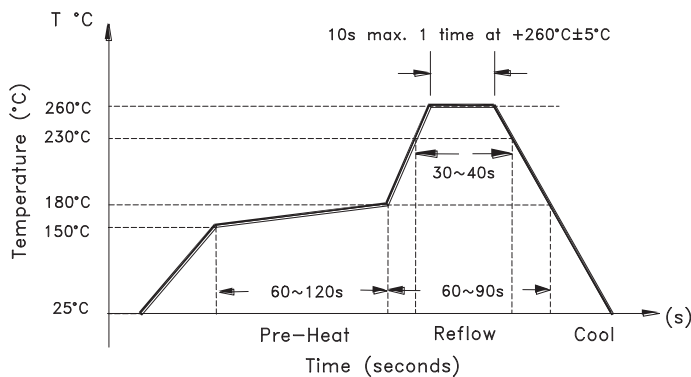
Do not design any conductive path between the pattern

Example for solder pattern



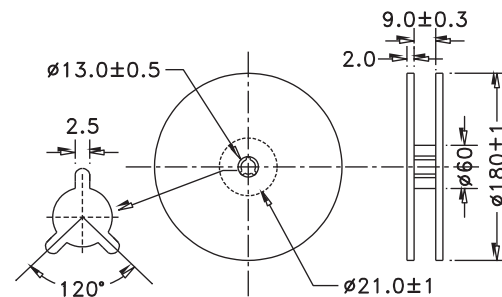
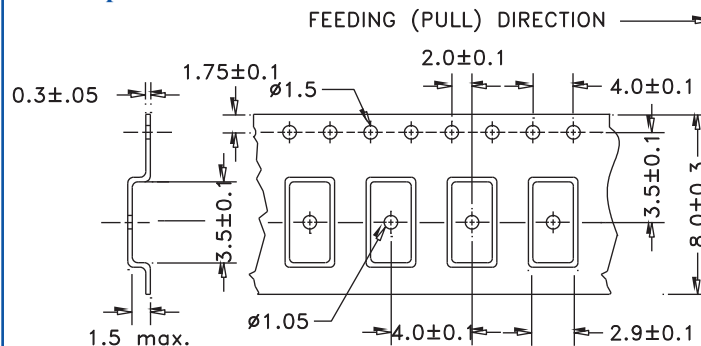
Dimensions: mm

REFLOW PROFILE:



TAPE & REEL:

1000pcs/reel



Dimensions: mm



Need a test socket for the ABM8X Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N **AXS-3225-04-01**

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