

# ULTRA MINIATURE CERAMIC PACKAGE HIGH STABILITY SMD CRYSTAL

**ABM8X**



**RoHS**  
Compliant



3.2 x 2.5 x 0.6mm

## FEATURES:

- -40°C to +125°C wide operating temperature range
- $\pm 40$  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

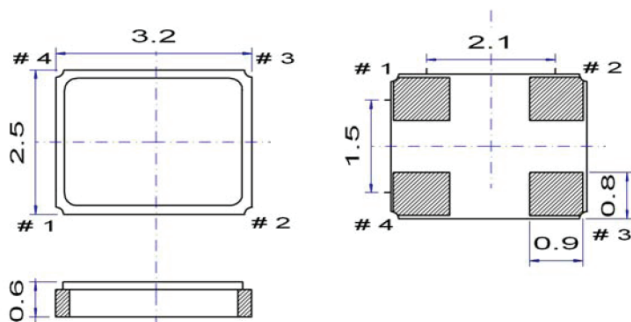
## APPLICATIONS:

- 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 $\pm$ 3°C 10 years
Equivalent series resistance (R1)	-----	-----	60	$\Omega$	
Shunt capacitance (C0)	-----	-----	2.5	pF	
Motional capacitance (C1)	-----	2.0	-----	fF	
Load capacitance (CL)	-----	10	-----	pF	
Drive Level	50	-----	100	$\mu$ W	
Insulation Resistance	500	-----	-----	M $\Omega$	@100Vdc $\pm$ 15V

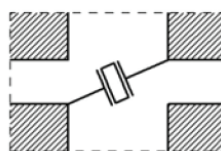
## OUTLINE DIMENSIONS:



### Pin function

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

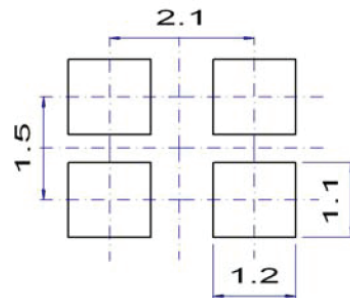
### Top view



Pad #2 & #4 connected with the metal cap

*Do not design any conductive path between the pattern*

### Example for solder pattern



Dimensions: mm

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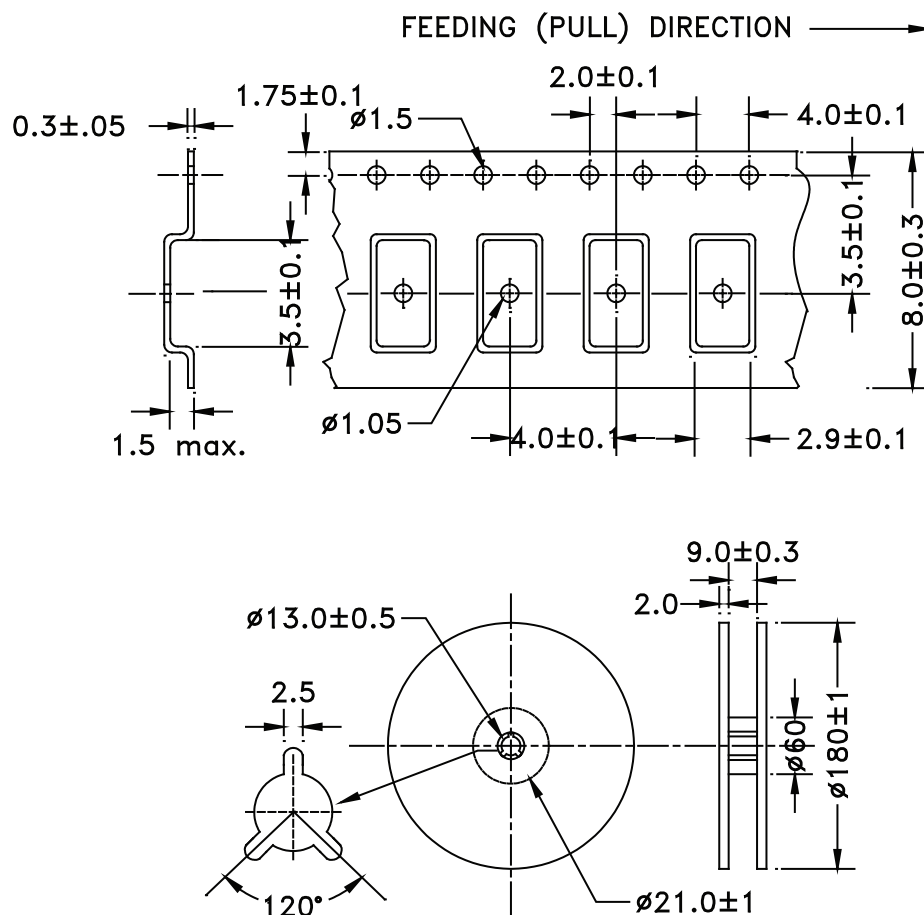
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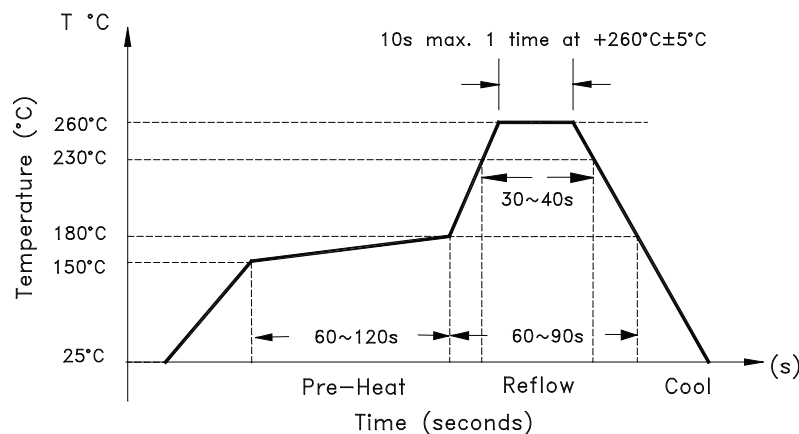
## TAPE & REEL

1000pcs/reel



Dimensions: mm

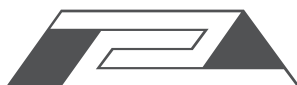
## REFLOW PROFILE



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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