

# 32.768kHz SMD LOW PROFILE CRYSTAL

ABS06



RoHS/RoHS II Compliant

ABS06



2.0 x 1.2 x 0.6mm

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

## FEATURES:

- Miniature size 2.0 x 1.2 x 0.6mm ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -55°C to +125°C for industrial applications

## APPLICATIONS:

- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications
- PDA and Palm Pilots

## STANDARD SPECIFICATIONS:

| Parameters                        | Minimum                     | Typical | Maximum | Units              | Notes                                            |
|-----------------------------------|-----------------------------|---------|---------|--------------------|--------------------------------------------------|
| Frequency                         |                             | 32.768  |         | kHz                |                                                  |
| Operation Mode                    | Flexural Mode (Tuning Fork) |         |         |                    |                                                  |
| Operating Temperature             | -40                         |         | +85     | °C                 |                                                  |
| Storage Temperature               | -55                         |         | +125    | °C                 |                                                  |
| Frequency Tolerance @+25°C        | -20                         |         | +20     | ppm                | See options<br>Tested at 0.5uW                   |
| Temperature Coefficient:          | -0.04                       | -0.03   | -0.02   | ppm/T <sup>2</sup> |                                                  |
| Turn-over temperature:            | +20                         | +25     | +30     | °C                 |                                                  |
| Equivalent series resistance (R1) |                             |         | 90      | kΩ                 | For -40 ~ +85°C option                           |
|                                   |                             |         | 110     | kΩ                 | For -40 ~ +125°C option<br>& -55 ~ +125°C option |
| Load capacitance (CL)             |                             | 12.5    |         | pF                 | See options                                      |
| Drive Level                       |                             | 0.1     | 0.5     | μW                 |                                                  |
| Q value                           | 9000                        |         |         |                    |                                                  |
| Aging@25°C±3°C                    | -3                          |         | 3       | ppm                | First year                                       |
| Insulation Resistance             | 500                         |         |         | MΩ                 | @ 100Vdc ± 15V                                   |

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

ABS06 – 32.768 kHz -  -  -  -

| Load Capacitance | Operating Temp. Range | Freq. Tolerance | Packaging      |
|------------------|-----------------------|-----------------|----------------|
| Blank: 12.5pF    | Blank: -40 ~ +85°C    | Blank: ±20ppm   | Blank: Bulk    |
| 9: 9pF           | H: -40 ~ +125°C       | 1: ±10ppm       | T: Tape & Reel |
| 7: 7pF           | W: -55 ~ +125°C       | 4: ±30ppm       | (3000pcs/reel) |
| 6: 6pF           |                       |                 |                |
| 4P: 4pF          |                       |                 |                |

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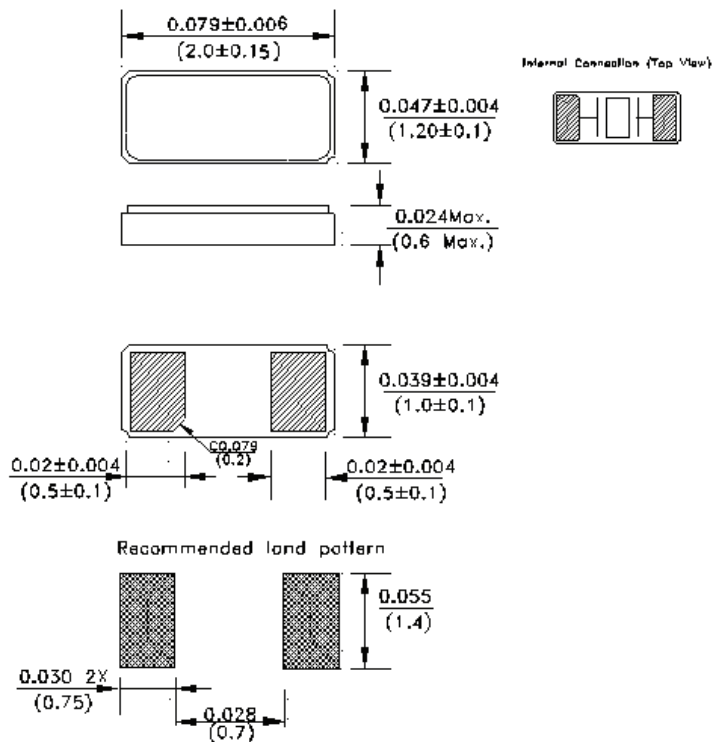
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2.0 x 1.2 x 0.6mm

## OUTLINE DRAWING:

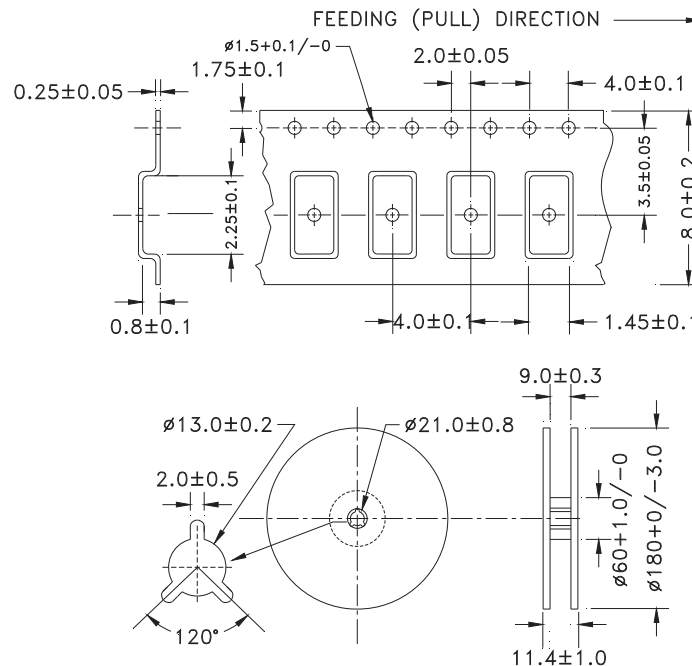


Note: Due to material availability, the outline and finish color of the component may vary. This variation in no way affects the electrical performance of the product

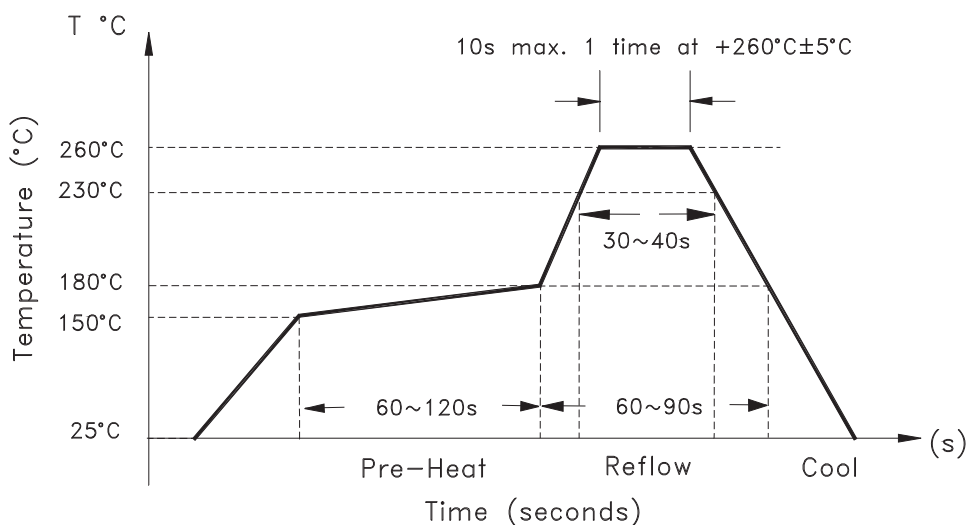
Dimensions: inches (mm)

## TAPE & REEL:

T=Tape and reel (3,000pcs/reel)



## REFLOW PROFILE:



Need a test socket for the ABS06 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N AXS-2012-02-04

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