

# SMD Ultra Low Profile Crystal

ABS07L



RoHS/RoHS II Compliant



3.2 x 1.5 x 0.38 mm

Moisture Sensitivity Level (MSL) = Level 1

## FEATURES:

- Lowest height kHz package for 32.768kHz Crystals
- 0.38mm height ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Excellent shock and vibration resistance

## APPLICATIONS:

- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications
- PDA and Palm Pilots
- Credit Cards with Security Technology

## STANDARD SPECIFICATIONS:

| Parameters                        | Minimum    | Typical | Maximum | Units              | Notes       |
|-----------------------------------|------------|---------|---------|--------------------|-------------|
| Frequency                         | 32.768     |         |         | kHz                |             |
| Operating Temperature             | -40        |         | +85     | °C                 |             |
| Storage Temperature               | -55        |         | +125    | °C                 |             |
| Frequency Tolerance @+25°C        | -20        |         | +20     | ppm                | See options |
| Temperature Coefficient:          | -0.035±10% |         |         | ppm/C <sup>2</sup> |             |
| Turn-over temperature:            | +20        | +25     | +30     | °C                 |             |
| Equivalent series resistance (R1) |            | 55      | 80      | kΩ                 |             |
| Shunt capacitance (C0)            |            | 1.4     |         | pF                 |             |
| Motional capacitance (C1)         |            | 3.5     |         | fF                 |             |
| Load capacitance (CL)             | 12.5       |         |         | pF                 | See options |
| Drive Level                       |            |         | 0.5     | μW                 |             |
| Aging@25°C                        | -3         |         | 3       | ppm                | First year  |
| Insulation Resistance             | 500        |         |         | MΩ                 |             |

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ABS07L - 32.768 kHz -  -  -

|                         |                        |                                  |
|-------------------------|------------------------|----------------------------------|
| <b>Load Capacitance</b> | <b>Freq. Tolerance</b> | <b>Packaging</b>                 |
| Blank: 12.5pF           | Blank: ±20ppm          | Blank: Bulk                      |
| 9: 9pF                  | 4: ±30ppm              | T: Tape & Reel<br>(3000pcs/reel) |
| 7: 7pF                  |                        |                                  |

Note: Please contact Abracon for tighter Freq. tolerance

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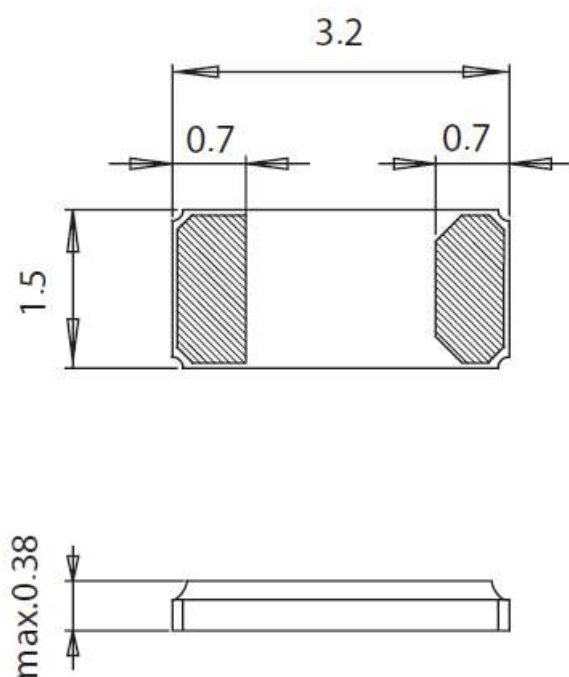


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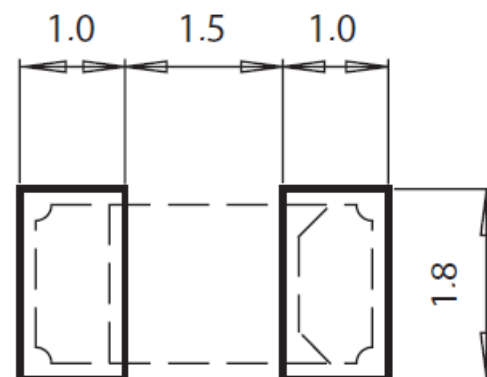


3.2 x 1.5 x 0.38 mm

## OUTLINE DRAWING:

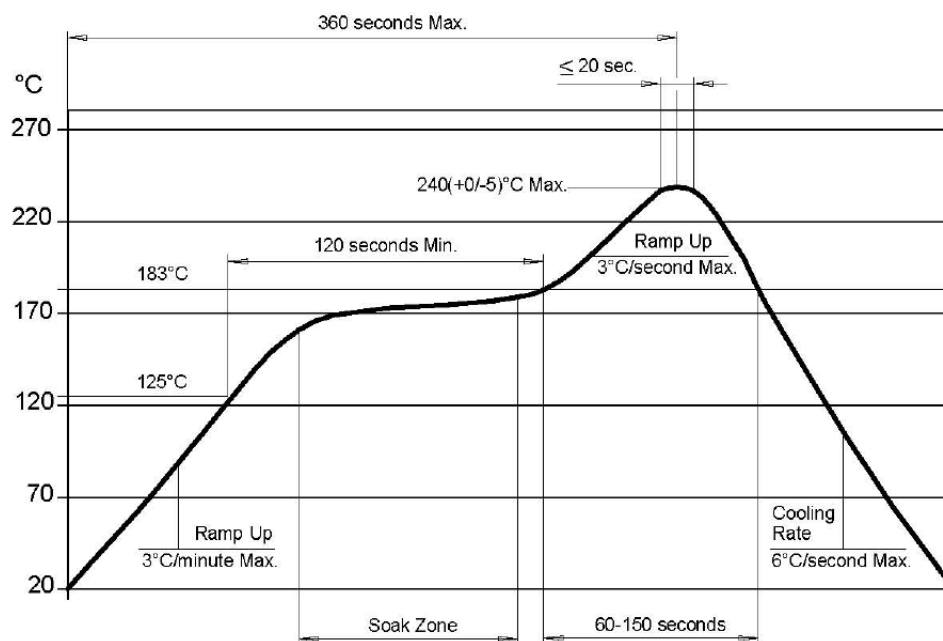


Recommended Land Pattern



Dimensions: mm  
All Dimensions are typical values.

## RECOMMENDED REFLOW PROFILE:



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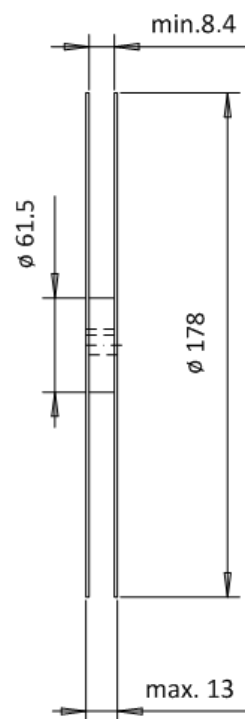
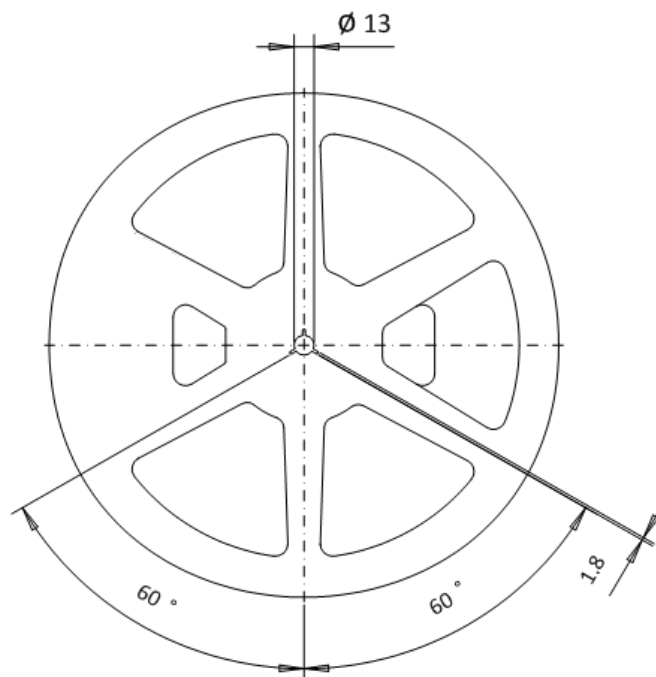
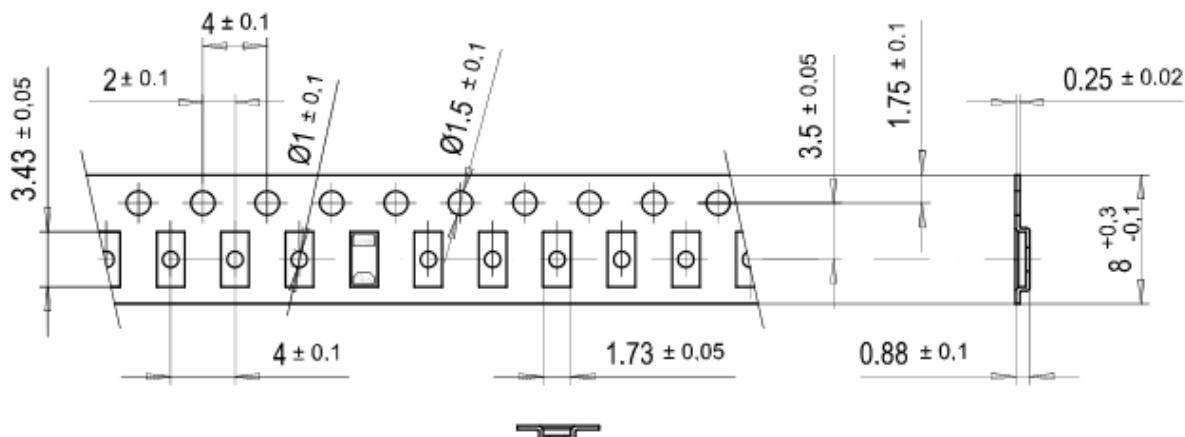
RoHS/RoHS II Compliant



3.2 x 1.5 x 0.38 mm

## TAPE & REEL:

Packaging: T= Tape & Reel (3000pcs/reel)



Dimensions: mm

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