

32.768 kHz LOW FREQUENCY SMD CRYSTAL



ABS25

Pb in High Temperature Solder
(exempt per RoHS 2002/95/EC Annex (7))

**RoHS
Compliant**

➤ **FEATURES:**

- Plastic molded SMD
- 2.5mm height ideal for high density circuit boards
- Suitable for RoHS compliant reflow
- Extended temperature -40°C to +85°C for industrial applications

➤ **APPLICATIONS:**

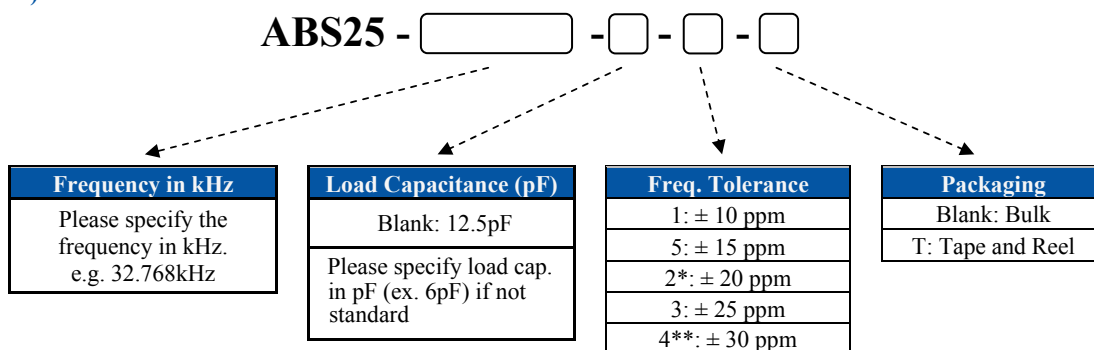
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Computer clock

➤ **STANDARD SPECIFICATIONS:**

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|-----------------------------------|---------|------------|---------|--------------------|----------------------------------|
| Nominal Frequency | ---- | 32.768 | ---- | kHz | |
| Frequency Range | 30 | ---- | 100 | kHz | |
| Operating Temperature | -40 | ---- | +85 | °C | |
| Turnover Temperature | +20 | +25 | +30 | °C | |
| Storage Temperature | -55 | ---- | +125 | °C | |
| Frequency Tolerance @+25°C | -20 | ---- | +20 | ppm | 32.768kHz |
| | -30 | ---- | +30 | | Other frequencies See options |
| Capacitance Ratio (C0/C1) | ---- | 450 | ---- | | 32.768kHz |
| | ---- | 425 to 800 | ---- | | Other frequencies |
| Frequency Coefficient (β) | -0.040 | -0.034 | -0.028 | ppm/T ² | |
| Equivalent series resistance (R1) | ---- | ---- | 50 | kΩ | |
| Shunt capacitance (C0) | ---- | 1.35 | ---- | pF | 32.768kHz |
| | | 0.8 to 1.7 | | | Other frequencies |
| Load capacitance (CL) | 12.5 | | | pF | See options |
| Drive Level | ---- | ---- | 1 | μW | |
| Aging | -3 | ---- | +3 | ppm | @25°C±3°C First year |
| | -5 | ---- | +5 | | |
| Insulation Resistance | 500 | ---- | ---- | MΩ | @ 100Vdc ± 15V |

➤ **OPTIONS AND PART IDENTIFICATION:**

(Left blank if standard)



*STD for 32.768kHz. Please leave this blank if F is 32.768kHz.

**STD for other frequencies. Please leave this blank if F is not 32.768kHz.

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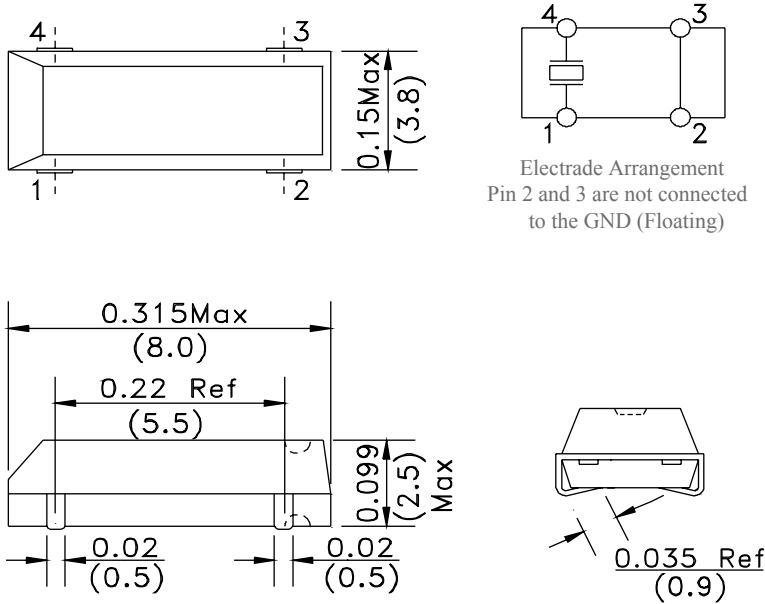


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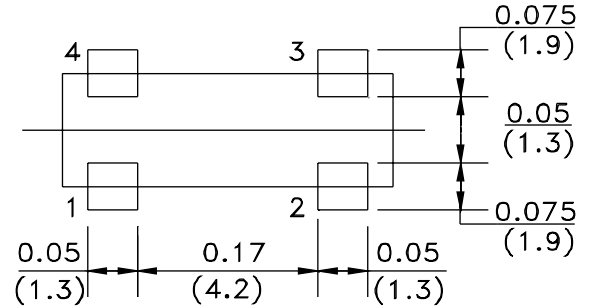
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OUTLINE DRAWING:

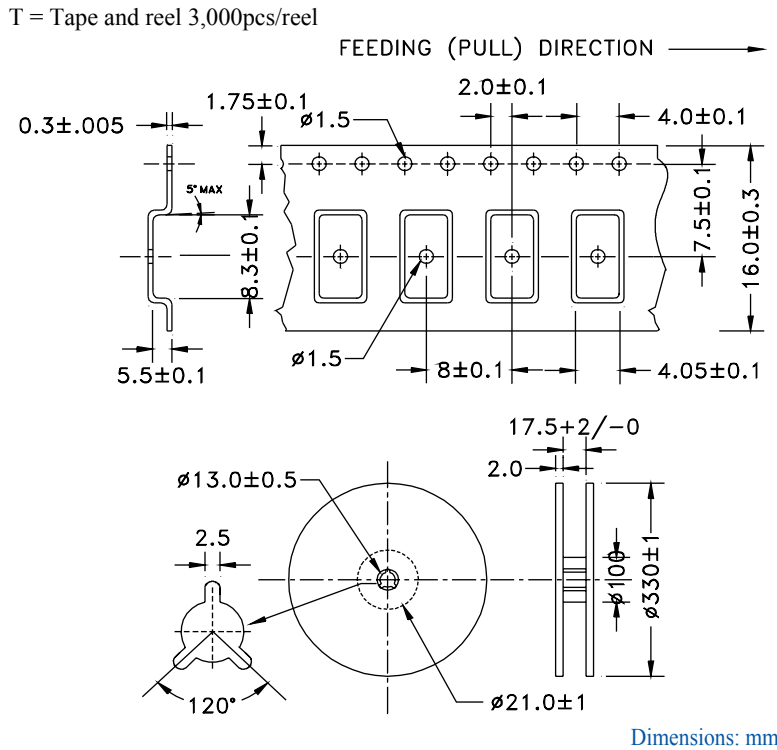


Recommended Land Pattern

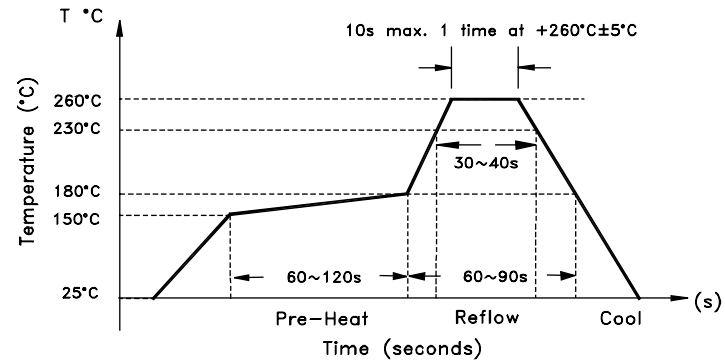


Dimensions: (inches) mm

TAPE & REEL:



REFLOW PROFILE



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