

# 32.768kHz SMD LOW PROFILE CRYSTAL

ABS05

ABS05



ESD Sensitive



RoHS/RoHS II compliant

1.6 x 1.0 x 0.5mm

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

## FEATURES:

- Smallest 32.768kHz package available
- 0.5mm height ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -40°C to +85°C for industrial applications

## APPLICATIONS:

- Smart Display Credit Cards
- 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	-40		+85	°C	
Frequency Tolerance @+25°C	-20		+20	ppm	See options
Temperature Coefficient:	-0.04	-0.03	-0.02	ppm/T <sup>2</sup>	
Turn-over temperature:	+20	+25	+30	°C	
Equivalent series resistance (ESR)			90	kΩ	
Load capacitance		12.5		pF	See options
Drive Level			0.5	µW	

## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ABS05 – 32.768 kHz -   -   -  

Load Capacitance

Blank: 12.5pF
9: 9pF
Contact Abrac on for non-standard capacitance

Frequency Tolerance

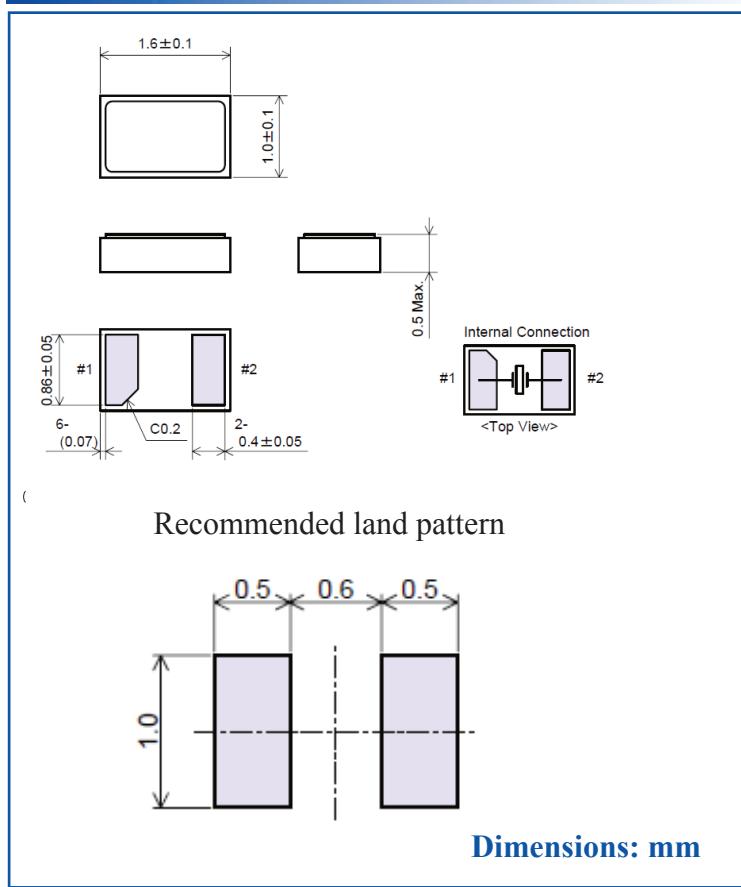
Blank: ±20ppm
1: ±10ppm
4: ±30ppm

Packaging

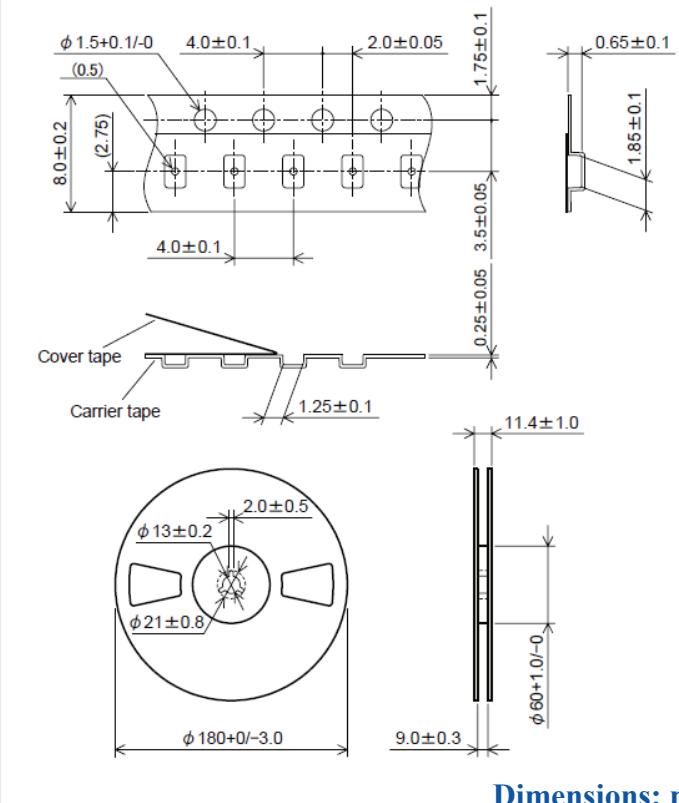
Blank: Bulk
T: Tape & Reel (3000pcs/reel)
T5: Tape & Reel (5000pcs/reel)



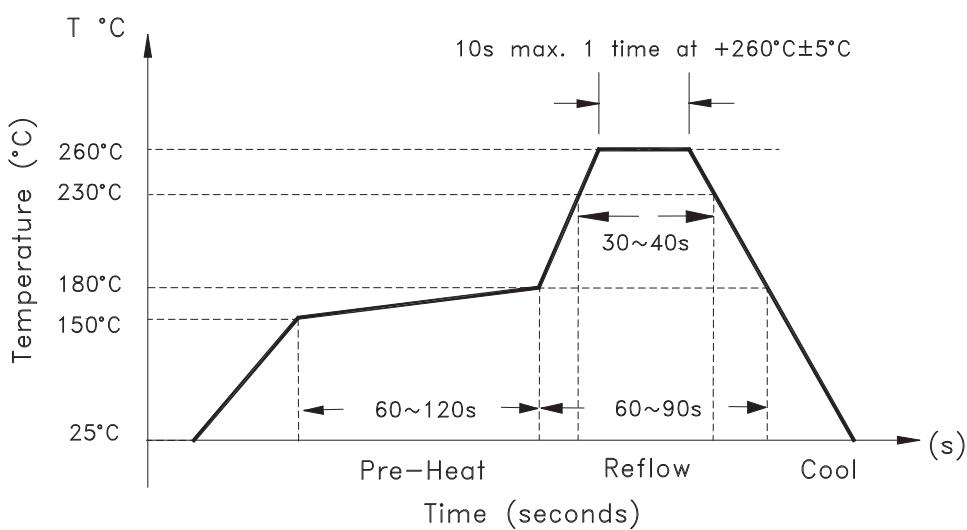
## OUTLINE DRAWING:



## TAPE & REEL:

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


## REFLOW PROFILE:



Need a test socket for the ABS05 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N AXS-2012-02-04

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