

# 32.768kHz SMD LOW PROFILE CRYSTAL



3.2 x 1.5 x 0.9 mm

**ABS07**

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



RoHS/RoHS II

## FEATURES:

- Low frequency in small size SMD
- 0.9mm height ideal for high density circuit boards
- Seam sealed ceramic package offers excellent environmental & heat resistance
- Extended temperature -55°C to +125°C for industrial applications

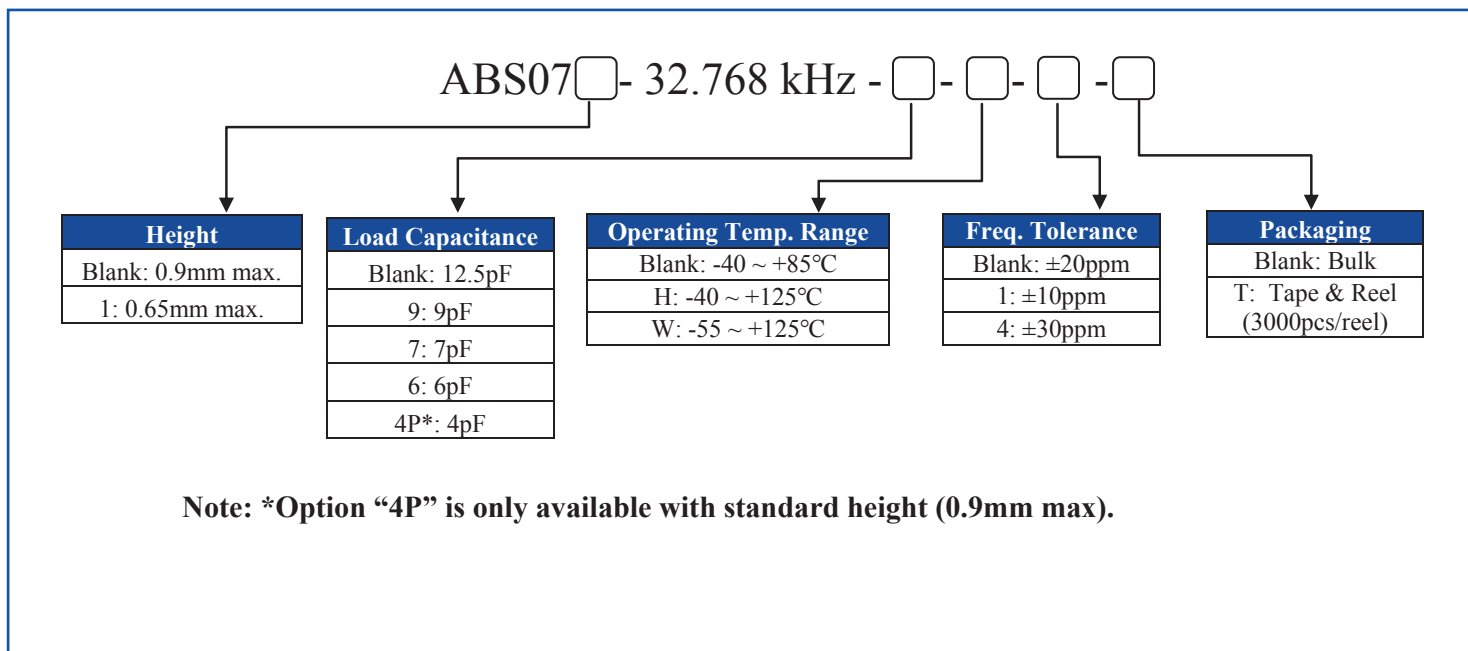
## APPLICATIONS:

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

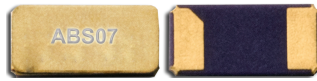
## STANDARD SPECIFICATIONS

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency	32.768			kHz	
Operation Mode	Flexural Mode (Tuning Fork)				
Operating Temperature	-40		+85	°C	See options
Storage Temperature	-55		+125	°C	
Frequency Tolerance @+25°C	-20		+20	ppm	See options
Temperature Coefficient:	-0.040	-0.036		ppm/T <sup>2</sup>	
Turn-over temperature:	+20	+25	+30	°C	
Equivalent series resistance (R1)			70	kΩ	
Shunt capacitance (C0)		0.9 ~ 1.2		pF	
Load capacitance (CL)		12.5		pF	See options
Drive Level		0.1	0.5	μW	
Q value	10000	30000			
Aging@25°C±3°C	-3		3	ppm	First year
Insulation Resistance	500			MΩ	@ 100Vdc ± 15V

## OPTIONS AND PART IDENTIFICATION (left blank if standard)



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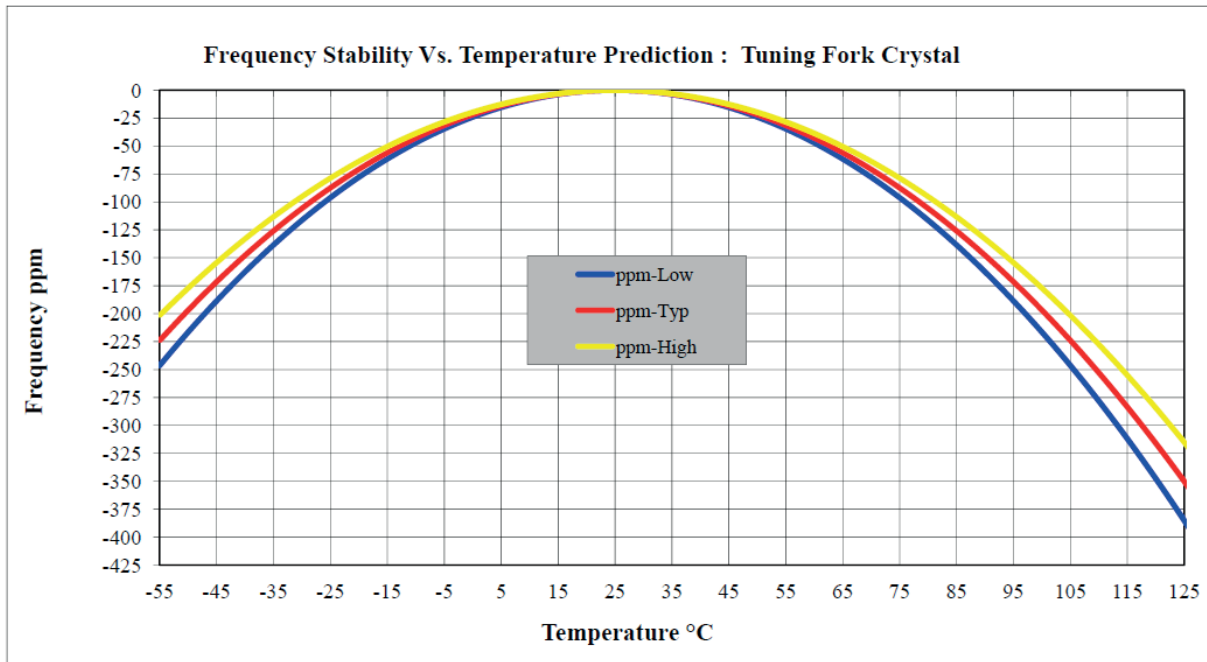


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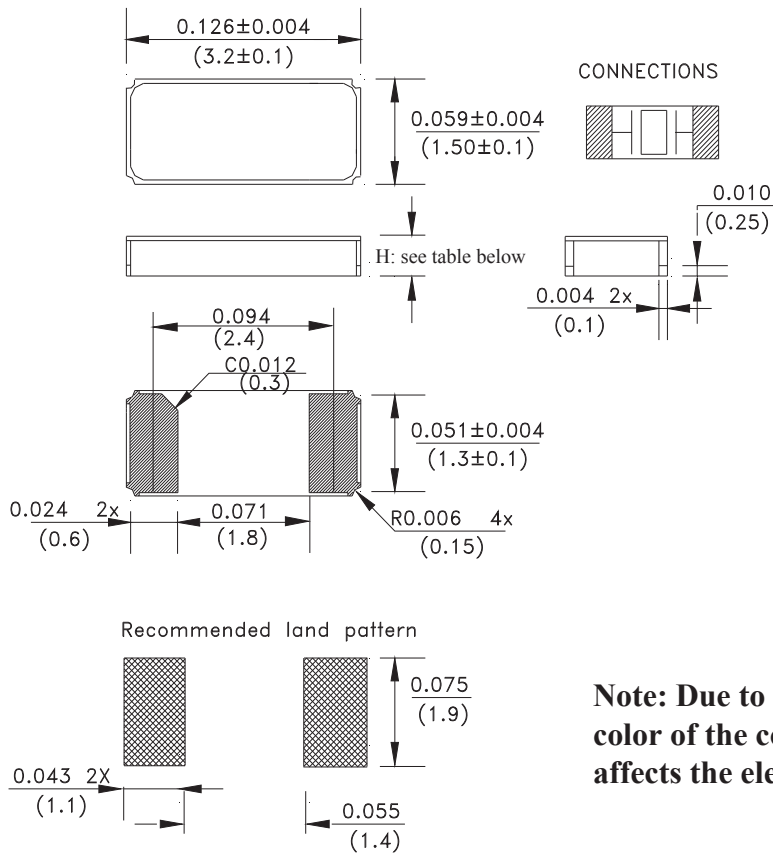


3.2 x 1.5 x 0.9 mm

## FREQUENCY VS. TEMPERATURE CHARACTERISTICS



## OUTLINE DIMENSIONS:



Part Number	Height (H)
ABS07	0.9 mm max.
ABS071	0.65 mm max.

**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)

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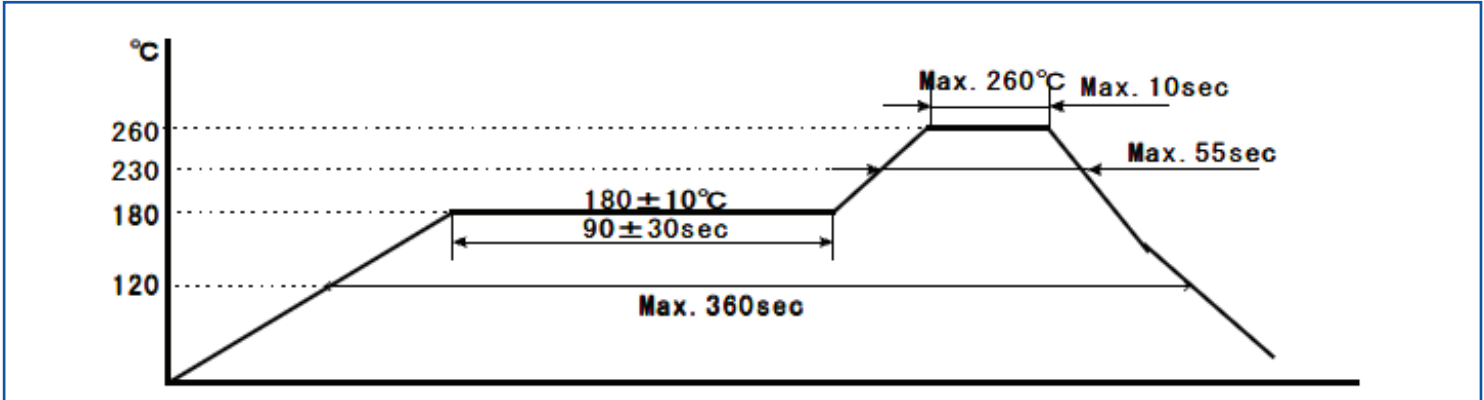
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RoHS/RoHS II

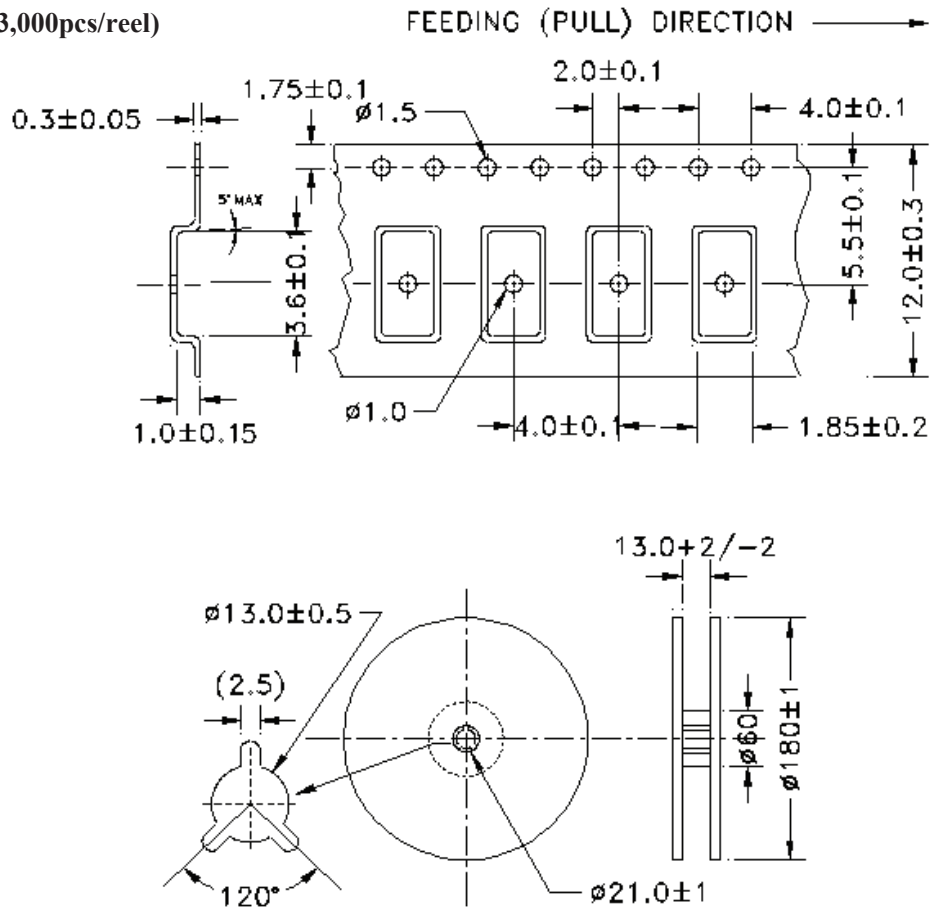
3.2 x 1.5 x 0.9 mm

## REFLOW PROFILE



## TAPE & REEL

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



Dimensions: mm

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CERTIFIED



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