

# 32.768kHz SMD LOW PROFILE CRYSTAL

ABS07

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)

ABS07□ - 32.768 kHz - □ - □ - □ - □

Height	Load Capacitance	Operating Temp. Range	Freq. Tolerance	Packaging
Blank: 0.9mm max. 1: 0.65mm max.	Blank: 12.5pF 9: 9pF 7: 7pF 6: 6pF 4P*: 4pF	Blank: -40 ~ +85°C H: -40 ~ +125°C W: -55 ~ +125°C	Blank: ±20ppm 1: ±10ppm 4: ±30ppm	Blank: Bulk T: Tape & Reel (3000pcs/reel)

**Note:** \*Option "4P" is only available with standard height (0.9mm max).

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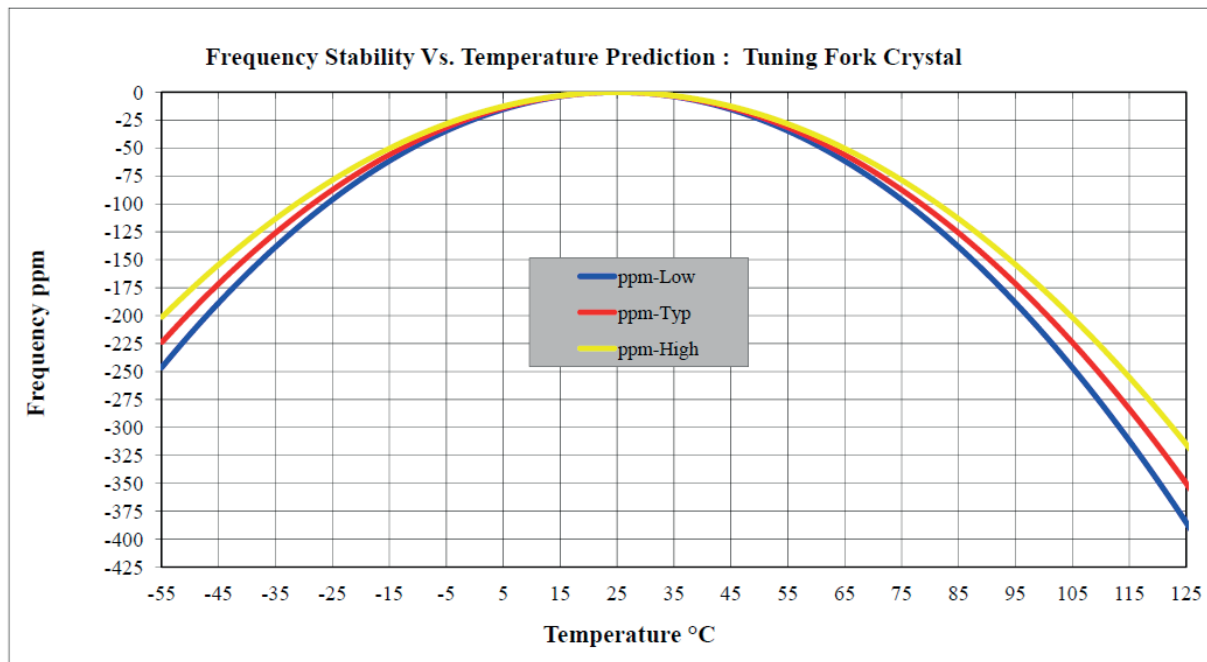


RoHS/RoHS II

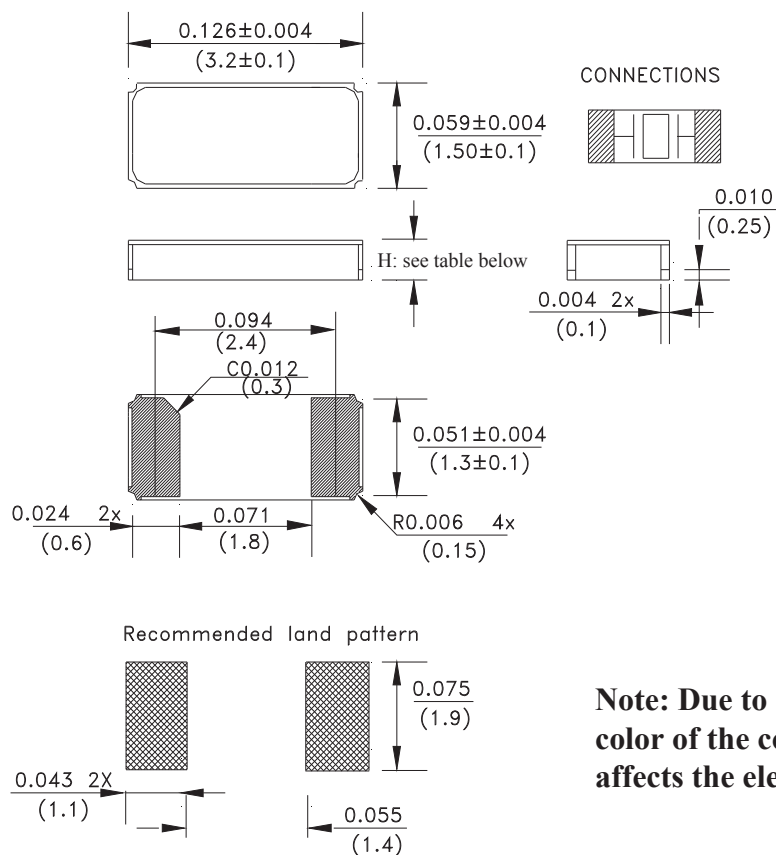


3.2 x 1.5 x 0.9 mm

## FREQUENCY VS. TEMPERATURE CHARACTERISTICS



## OUTLINE DIMENSIONS:



### CONNECTIONS



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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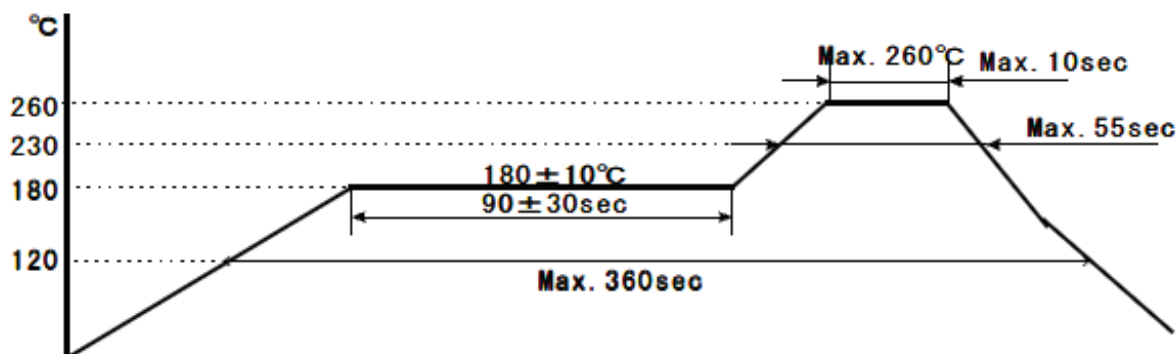


RoHS/RoHS II

ABS07

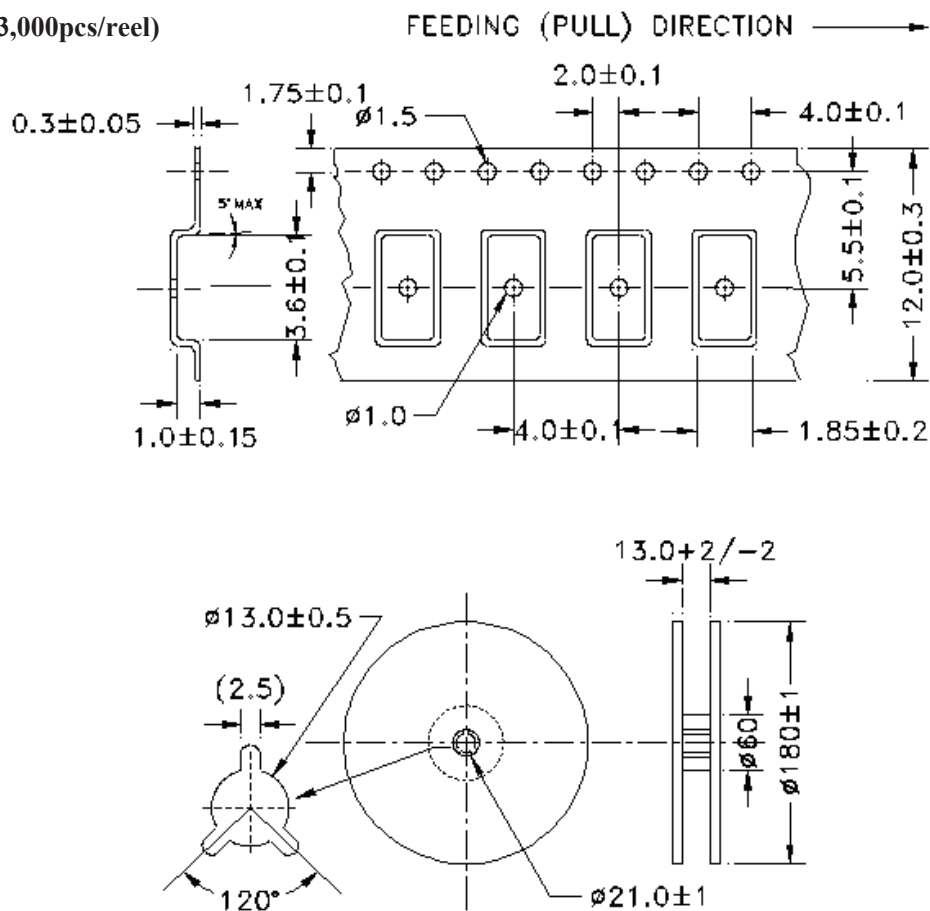
3.2 x 1.5 x 0.9 mm

## REFLOW PROFILE



## TAPE & REEL

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



Dimensions: mm

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2 Faraday, Suite# B | Irvine | CA 92618 **Revised: 08.19.15**

Ph. 949.546.8000 | Fax. 949.546.8001

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