# 32.768 kHz LOW FREQUENCY SMD CRYSTAL

ABS25

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





#### **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:

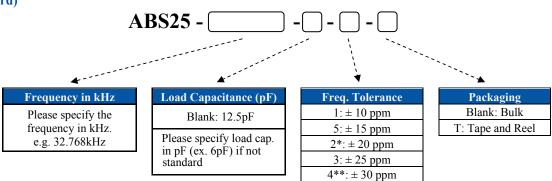
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Computer clock

### **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 (B)	-0.040	-0.034	-0.028	ppm/T <sup>2</sup>	
Equivalent series resistance (R1)			50	kΩ	
Shunt capacitance (C0)		1.35		pF	32.768kHz
		0.8 to 1.7		pF	Other frequencies
Load capacitance (CL)		12.5		pF	See options
Drive Level			1	μW	
Aging	-3		+3	ppm	@25°C±3°C
	-5		+5		First year
Insulation Resistance	500			MΩ	

# > OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)



<sup>\*</sup>STD for 32.768kHz. Please leave this blank if F is 32.768kHz.





<sup>\*\*</sup>STD for other frequencies. Please leave this blank if F is not 32.768kHz.

# 32.768 kHz LOW FREQUENCY SMD CRYSTAL

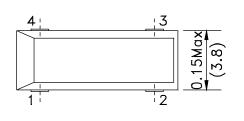
ABS25

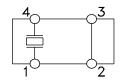
Pb in High Tempe rature Solder (exempt per RoHS 2002/95/EC Annex (7)) Compliant



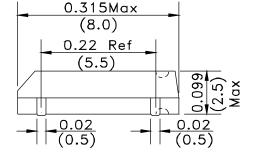


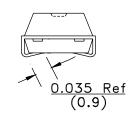
#### **OUTLINE DRAWING:**





Electrode Arrangement Pin 2 and 3 are not connected to the GND (Floating)





# Recommended Land Pattern 0.075 (1.9)0.05 (1.3)0.075 (1.9)0.17

(4.2)

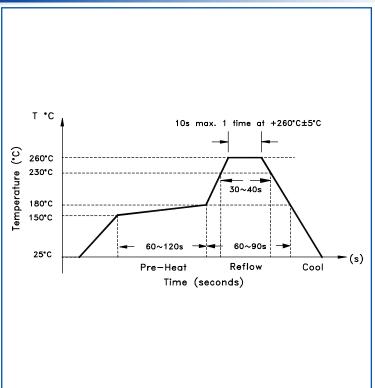
Dimensions: (inches) mm

## **► TAPE & REEL:**

# T = Tape and reel 3,000 pcs/reelFEEDING (PULL) DIRECTION 2.0±0.1 $0.3 \pm .005$ ø1.5 4.05±0.1 5.5±0.1 ø13.0±0.5 ø21.0±1 Dimensions: mm

#### REFLOW PROFILE

(1.3)



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