32.768kHz SMD LOW PROFILE CRYSTAL

ABS05





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:

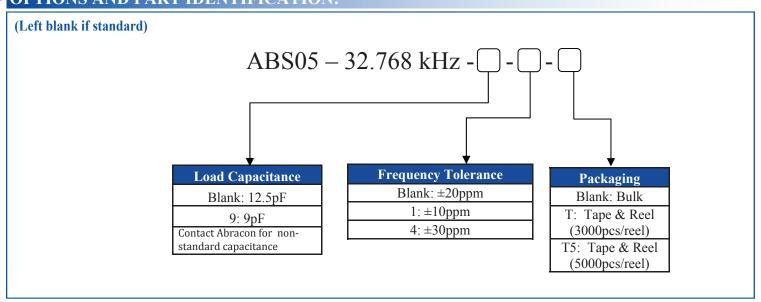
- 0.5mm height ideal for high density circuit boards
- Ceramic package offers excellent environmental & heat resistance
- Extended temperature -40°C to +85°C for industrial applications

> APPLICATIONS:

- Smart Display Credit Cards
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications
- PDA and Palm Pilots

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Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency		32.768		kHz	
Operation Mode	Flexura	Flexural Mode (Tuning Fork)			
Operating Temperature	-40		+85	°C	
Storage Temperature	-55		+125	°C	
Frequency Tolerance @+25°C	-20		+20	ppm	Standard (See options if other than STD)
Temperature Coefficient:	-0.04	-0.03	-0.02	ppm/T ²	
Turn-over temperature:	+20	+25	+30	°C	
Equivalent series resistance (ESR)			90	kΩ	
Shunt capacitance (C0)		1.3		pF	
Load capacitance		12.5	•	pF	Standard (See options if other than STD)
Drive Level			0.5	μW	
Aging @ +25°C±3°C	-3		+3	ppm	First Year
Insulation Resistance	500			ΜΩ	$ @ 100 \text{Vdc} \pm 15 \text{V} $

> OPTIONS AND PART IDENTIFICATION:





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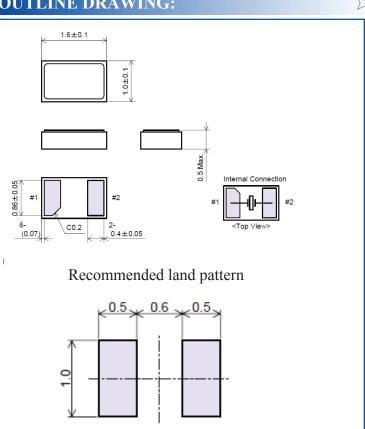
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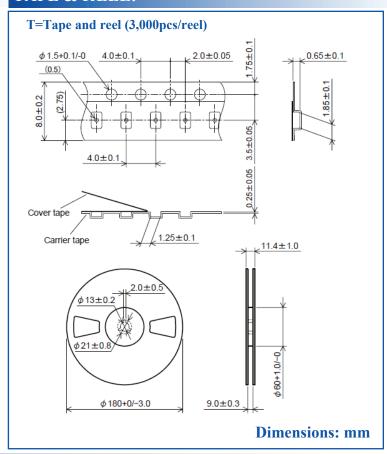


1.6 x 1.0 x 0.5mm

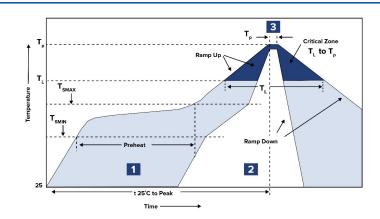
OUTLINE DRAWING:



► TAPE & REEL:



REFLOW PROFILE:



Dimensions: mm

Zone	Description	Temperature	Time	
1	Preheat	$\begin{array}{c} T_{SMIN} \sim T_{SMAX} \\ 150^{\circ}C \sim 180^{\circ}C \end{array}$	$60 \sim 120 \text{ sec.}$	
2	Reflow	T _L 230°C	$30 \sim 40$ sec.	
3	Peak heat	T _P 260°C±5°C	10 sec. MAX	

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