

ECN/PCN No.: 3818

For Manufacturer			
Product Description: 32.768kHz SMD Crystal	Abrakon Part Number / Part Series: ABS10	☐ Documentation only ☐ ECN ☒ EOL	☒ Series ☐ Part Number
Affected Revision: K	New Revision: EOL	Application:	☐ Safety ☒ Non-Safety
Prior to Change: ABS10 Rev. K			
After Change: EOL			
Cause/Reason for Change: Discontinuation of this older product package type and associated manufacturing capability.			
Change Plan			
Effective Date: 05/7/2021	Additional Remarks:		
Change Declaration:			
Issued Date: 05/7/2021	Issued By: <i>Stephanie Lopez</i>	Issued Department: Engineering	
Approval: <i>Thomas Culhane</i> Engineering Director	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable): 06/30/2021	Alternate Part Number / Part Series: None		
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: ☐ Approved ☐ Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
Customer Part Number:		Customer Project:	
Company Name:	Company Representative:	Representative Signature:	
Customer Remarks:			

32.768 kHz SMD LOW PROFILE CRYSTAL

ABS10



RoHS
Compliant

ABS10



4.9 x 1.8 x 1.0 mm

ABS10 is not recommended for new designs. Please consider the ABS04W or ABS05.

FEATURES:

- Low frequency in small size SMD
- 1.0mm 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:

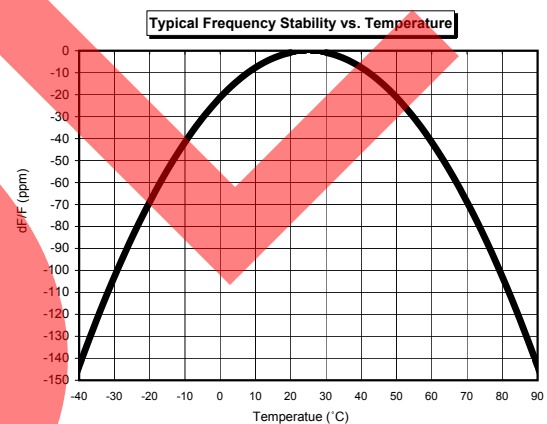
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Wireless communications
- PDA and Palm Pilots

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ABS10 Series
Nominal Frequency	32.768 kHz
Operating Temperature	-40°C to +85°C
Turn-over Temperature	+25°C to ±5°C
Storage Temperature	-55°C to +125°C
Frequency Tolerance	±20 ppm max. (see option)
Temperature Coefficient (β)	-0.034±0.006 ppm/T ²
Equivalent Series Resistance	70 kohms max.
Load Capacitance CL	12.5 pF (see option)
Drive Level	1.0 μ W max.
Aging (first year) 25°C first year	±5 ppm max.
Insulation Resistance	500 M Ω with 100 Vdc ±15V
Shunt capacitance Co	1.0pF typ.
Motional capacitance C1	2.0fF typ.

TUNING FORK CRYSTAL TEMPERATURE CURVE



OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ABS10 - 32.768kHz - - -

Load Capacitance

Blank: 12.5pF
9: 9pF
7: 7pF

*Contact ABRACON for non-standard load capacitances.

Freq. Tolerance

Blank: ±20 ppm
1: ±10 ppm
4: ±30 ppm

Packaging

Blank: Bulk
T: Tape & Reel

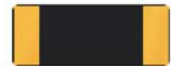
32.768kHz SMD LOW PROFILE CRYSTAL

ABS10



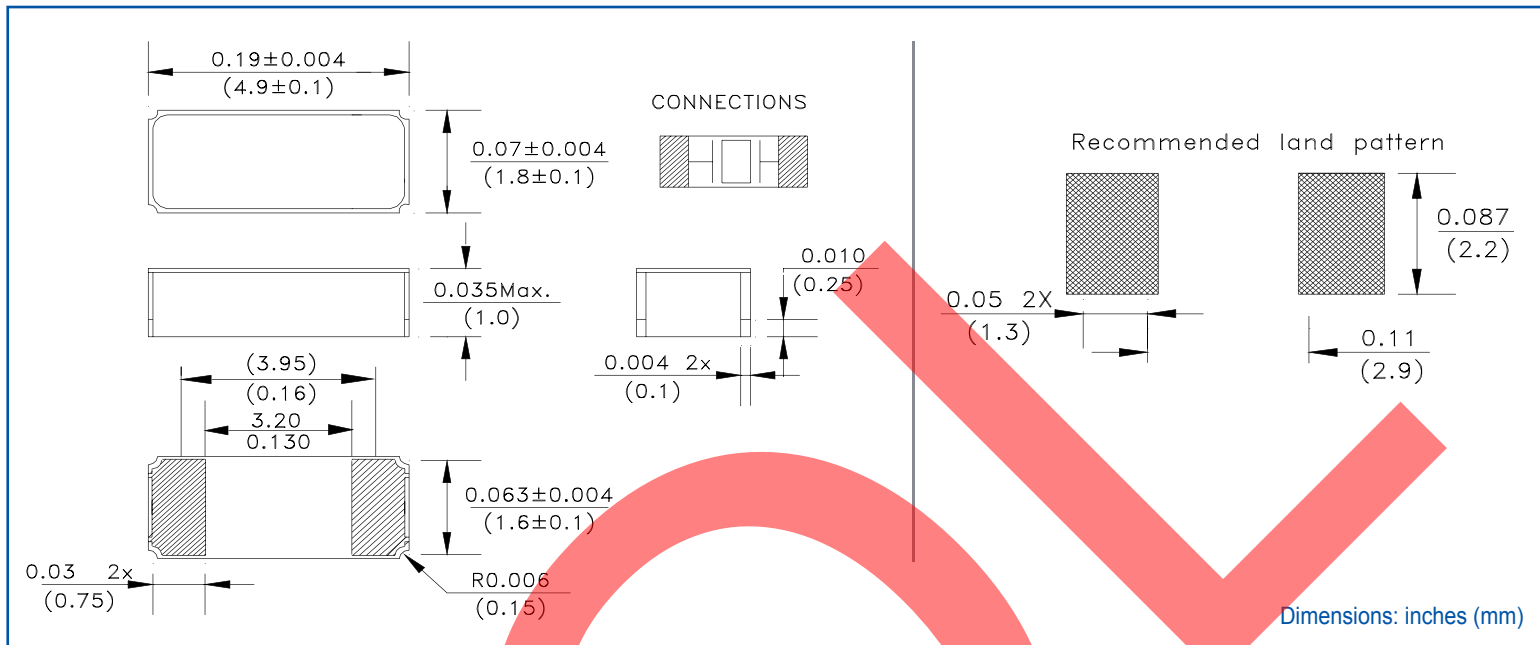
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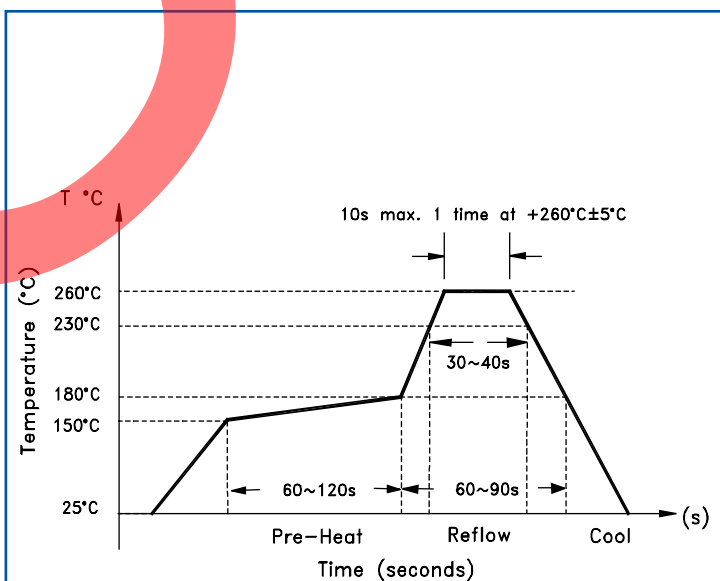
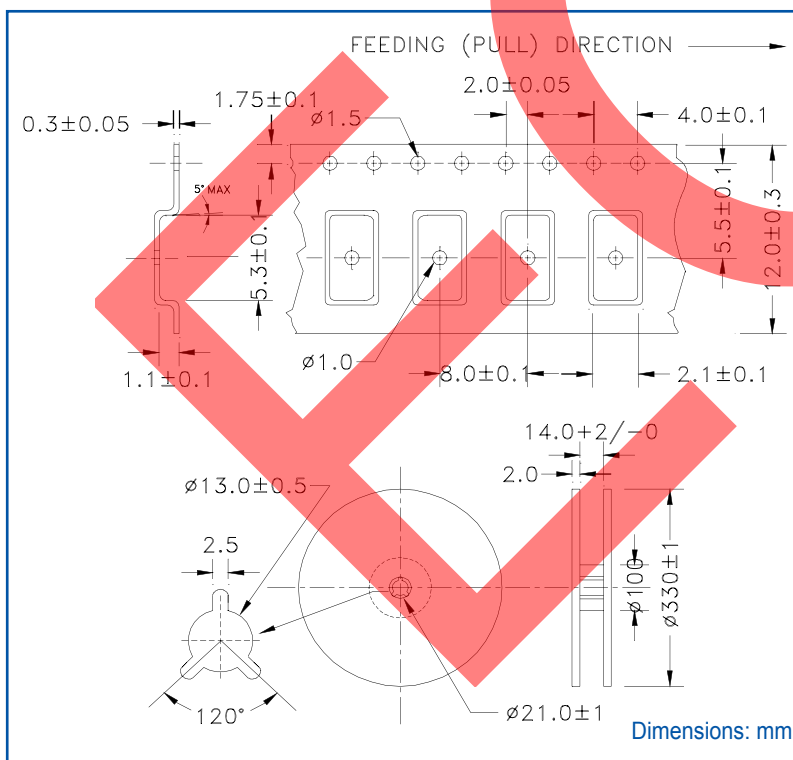
4.9 x 1.8 x 1.0 mm

OUTLINE DRAWING:



TAPE & REEL: T = Tape and reel 3,000 pcs/reel

REFLOW PROFILE



ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.



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