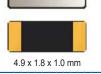
32.768 kHz S MD LOW PR OFILE CRYSTA L

ABS10





ABS10

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

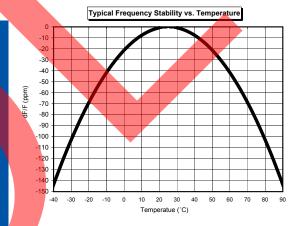
APPLICATIONS:

- 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 μW max.
Aging (first year) 25°C first year	± 5 ppm max.
Insulation Resistance	500 MΩ 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

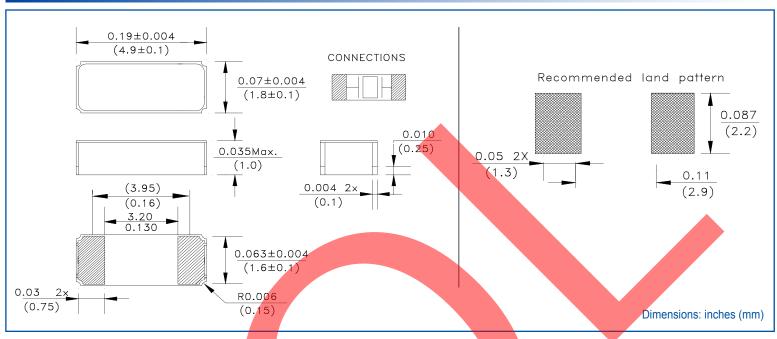
ABS10





ABS10

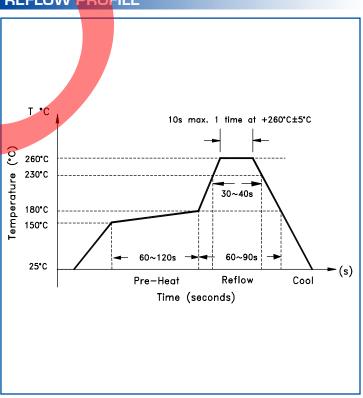
OUTLINE DRAWING:



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

 $\emptyset 21.0 \pm 1$

> 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.

Dimensions: mm



120°