

32.768kHz SMD LOW PROFILE CRYSTAL

ABS13

ABS13

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

RoHS
Compliant

6.9 x 1.4 x 1.3 mm

FEATURES:

- Low frequency
- Plastic package with embedded heat resistant crystal in cylinder package
- Extended temperature -40°C to +85°C for industrial applications
- IR reflow capable

APPLICATIONS:

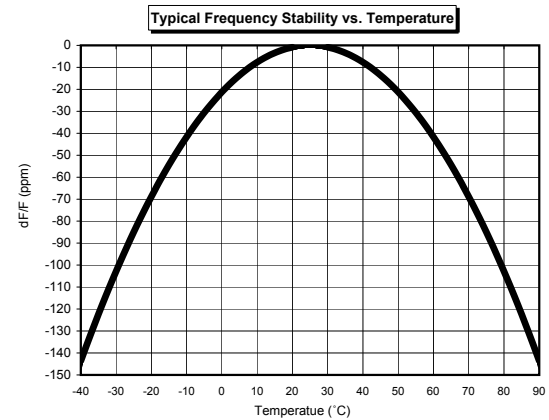
- Wide range in communication & measuring equipment
- Commercial & Industrial applications
- Automotive electronics applications
- Wireless communications
- PDA and Palm Pilots

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ABS13
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.
Frequency Coefficient (β)	-0.034±0.006 ppm/T ²
Equivalent Series Resistance	65 kohms max.
Load Capacitance CL	12.5 pF (see option)
Shunt Capacitance C0	1.2 pF typ.
Motional Capacitance C1	0.0023 pF typ.
Drive Level	1.0 μ W max.
Aging (first year) 25°C ± 3°C	± 3 ppm max.
Insulation Resistance	500 Mohms with 100 Vdc ±15V

TUNING FORK CRYSTAL TEMPERATURE CURVE



OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ABS13-32.768kHz-□ - □

CL Option

7 for 7pF

Packaging

Blank	Bulk
T	Tape and Reel

32.768kHz SMD LOW PROFILE CRYSTAL

ABS13

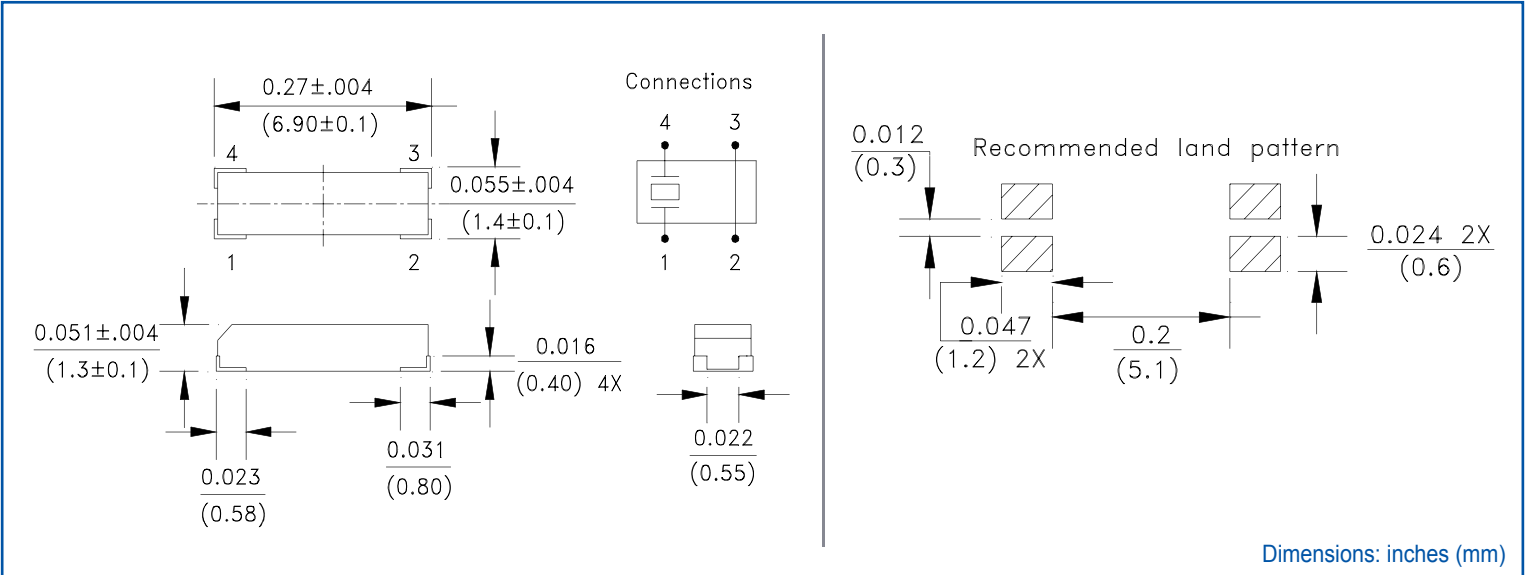
ABS13

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

RoHS
Compliant

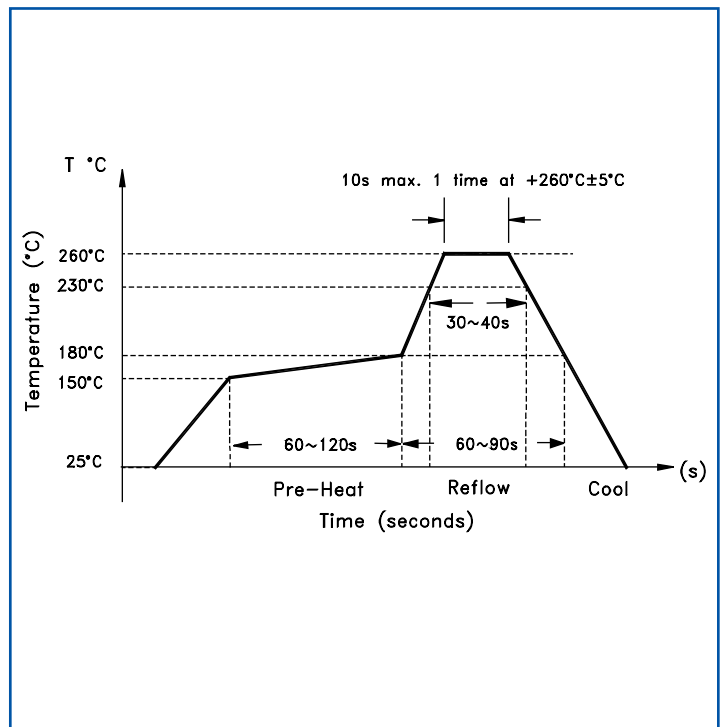
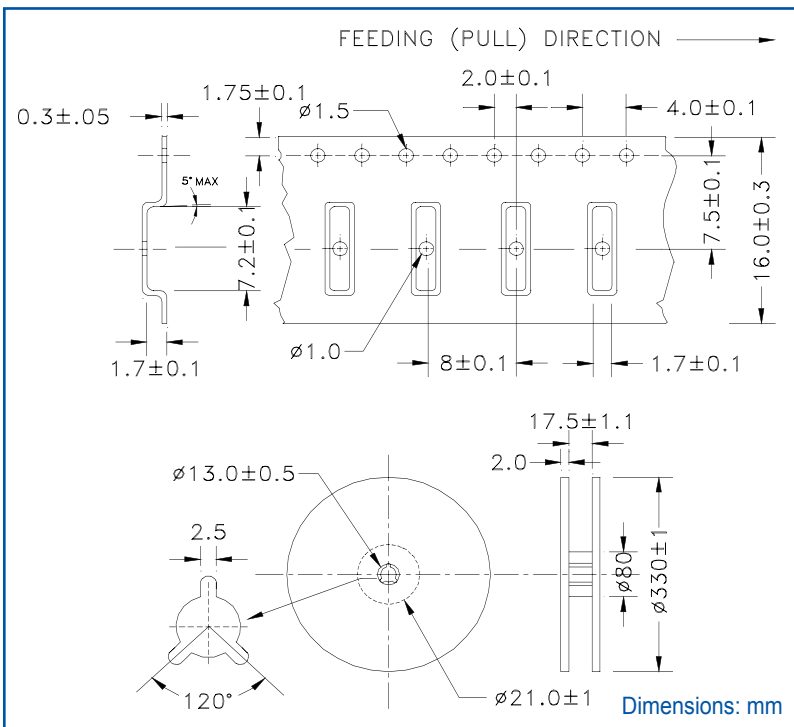
6.9 x 1.4 x 1.3 mm

OUTLINE DRAWING:



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

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 09.30.10**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com