

# 32.768kHz WATCH CRYSTAL, 6.2 x 02.1MM CYLINDER PACKAGE



6.2 x 02.1 mm

**AB26T**



**RoHS**  
Compliant

## FEATURES:

- Watch frequency
- 32.768kHz standard frequency

## APPLICATIONS:

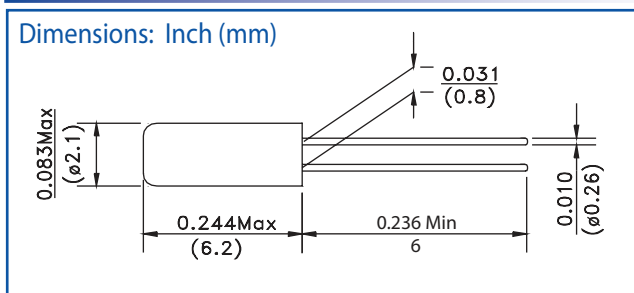
- Real time clock
- Measuring instruments
- Clock source for communication or A/V equipment

## STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N:	AB26T Series
Standard frequency:	<b>32.768kHz</b>
Additional frequencies available*	32.000kHz, 36.000kHz, 38.000kHz, 38.400kHz, 40.000kHz, 60.000kHz, 65.536kHz, 76.800kHz, 96.000kHz, 100.000kHz
Frequency range:	30kHz to 200kHz
Operating temperature:	-10°C to + 60°C (see option)
Storage temperature:	-40°C to + 85°C
Turn-over temperature:	+25°C ± 5°C
Frequency tolerance:	± 20 ppm max. for 32.768kHz (see option) ± 30 ppm max. for 30kHz ~ 200kHz (not including 32.768kHz)
Temperature Coefficient:	-0.034 ± 0.006 ppm/ T <sup>2</sup>
Equivalent series resistance:	35 kΩ max. (32.768kHz) 35 kΩ ~ 50 kΩ max. (30kHz ~ 200kHz)
Shunt capacitance C0:	0.8pF to 1.7pF typ.
Load capacitance CL:	12.5 pF typ. (see option)
Motional capacitance C1:	1 ~ 4 fF typ.
Capacitance ratio:	425 ~ 800 typ.
Quality factor:	70,000 typ. (32.768kHz)
Drive level:	1.0 μW max.
Aging @ 25° C first year:	± 3 ppm max. (32.768kHz) and ± 5 ppm max. (others)
Insulation resistance:	500 Mohms min. at 100Vdc ± 15V

\* For additional frequencies please contact Abracon.

## OUTLINE DRAWING:



## OPTIONS & PART IDENTIFICATION: (Left blank if standard)

### AB26T- Frequency-□ - □

#### CL Option

Please specify load cap. in pF (ex. 6pF)

#### Temperature options

E	0°C to + 70°C
B	-20°C to + 70°C



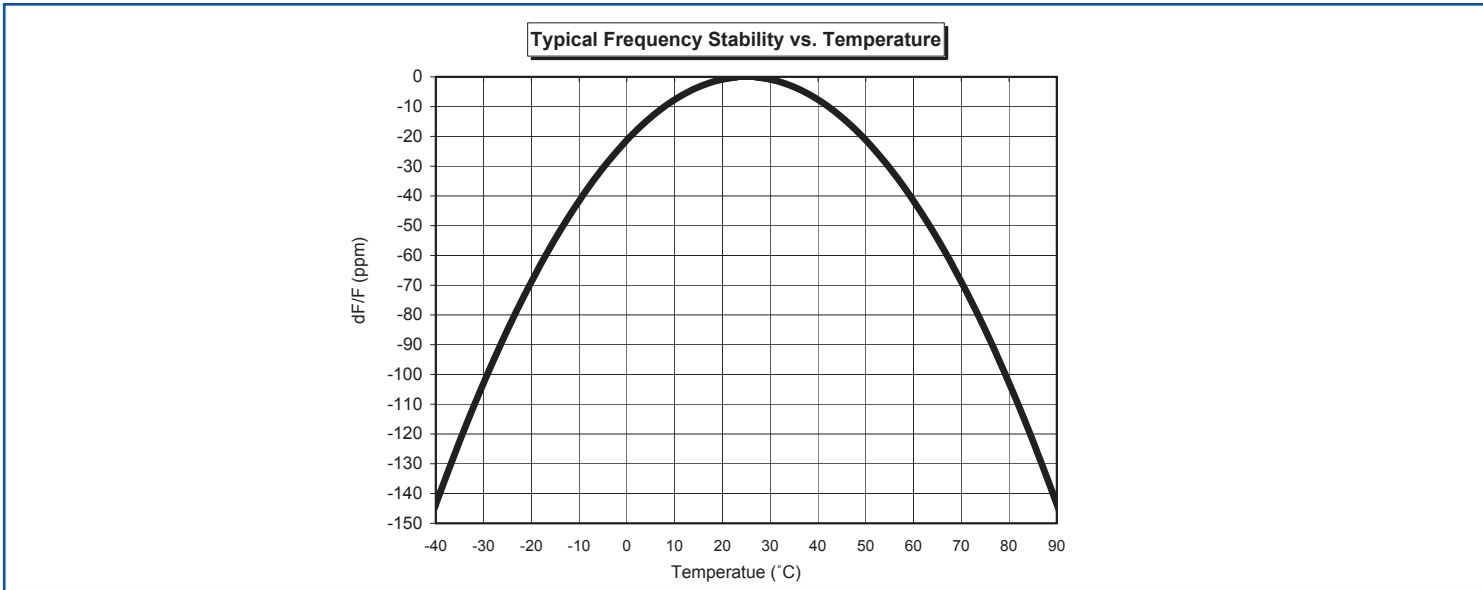
6.2 x 02.1 mm

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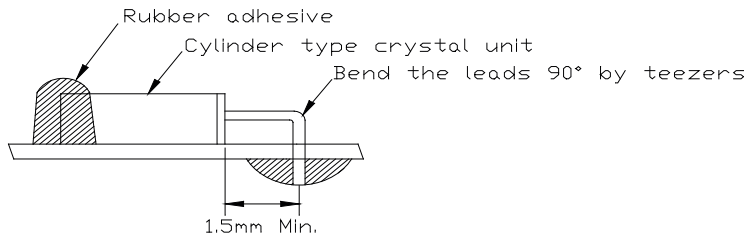
## TUNING FORK CRYSTAL TEMPERATURE CURVE



## HANDLING INSTRUCTIONS

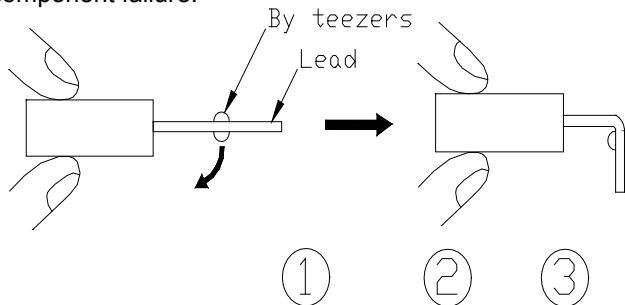
### Mounting:

(1) Soldering on the body of the cylinder type crystal unit must be strictly avoided due to deteriorate the characteristics or damage the products. Rubber adhesive is recommended.



(2) When the leads need to be bent by hand, follow the instructions below.

- Hold the body of the Cylinder type crystal unit in fingers.
- Pick at the part with tweezers, which you intend to bend. There should be more than 1.5mm (3.0mm is recommendable) from the body case.
- Bend the lead 90° by tweezers without pulling the lead strongly. Pulling the leads forcefully may cause cracks in the glass hermetic seal resulting in component failure.



**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.