

# LOW FREQUENCY CYLINDRICAL WATCH CRYSTAL

AB15T

AB15T



RoHS  
Compliant

5.1 x 1.5 mm

## FEATURES:

- Watch frequency
- Excellent heat resistance

## APPLICATIONS:

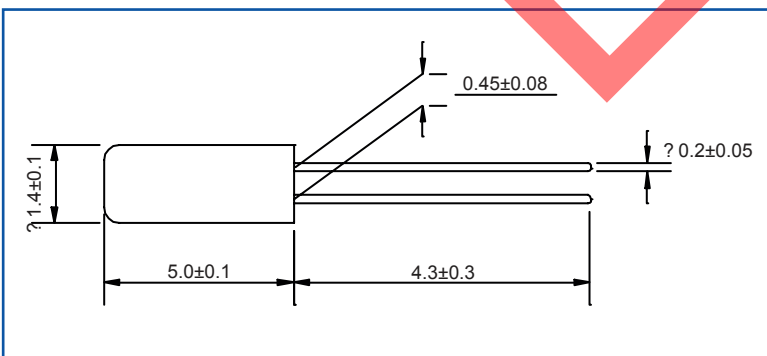
- Real time clock, Measuring instruments
- Clock source for communication or A/V equipment

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N	AB15T Series
Frequency Range	32.768 kHz
Operating Temperature	- 20°C to + 70°C
Storage Temperature	-40°C to + 85°C
Turn-over Temperature	+25°C to $\pm 5^\circ\text{C}$
Frequency Tolerance	$\pm 20$ ppm max.
Temperature Coefficient	$-0.034 \pm 0.006$ ppm/ T <sup>2</sup>
Equivalent Series Resistance	40 kohms max.
Shunt Capacitance C <sub>0</sub>	1.00 pF typ.
Load Capacitance C <sub>L</sub>	12.5 pF
Quality factor	85,000 typ.
Drive Level	1 $\mu\text{W}$ max.
Aging at 25°C First Year	$\pm 3$ ppm max.
Insulation Resistance	500 Mohms min. at 100 Vdc $\pm 15\text{V}$

## OUTLINE DRAWING:



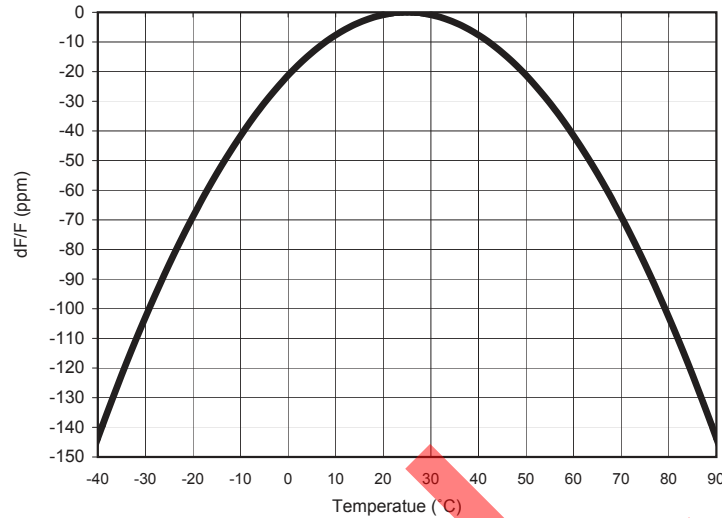
## PART IDENTIFICATION: (ORDERING PART NUMBER)

**AB15T-32.768KHz**



## TUNING FORK CRYSTAL TEMPERATURE CURVE

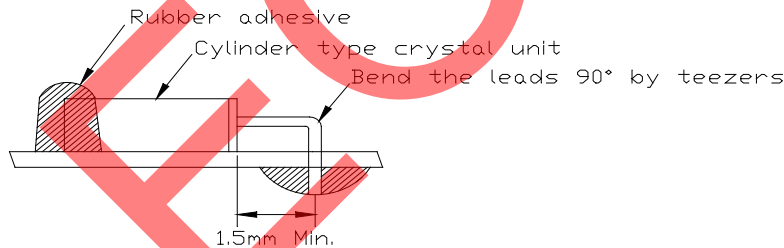
Typical Frequency Stability vs. Temperature



## HANDLING INSTRUCTIONS

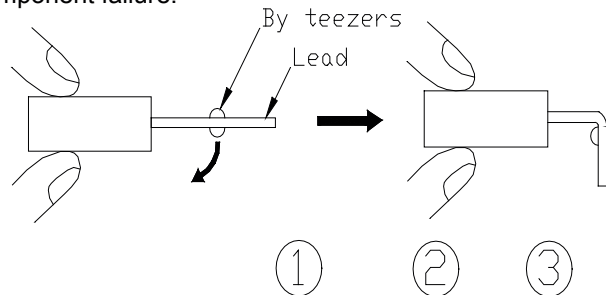
### Mounting:

(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.