32.768kHz WATCH CRYSTAL, 8.3 x ø3.2MM CYLINDER PACKAGE

AB38T

8.3 x ø3.2mm

Pb RoHS Compliant

FEATURES:

- Watch frequency
- Frequency range from 30kHz to 200kHz
- Excellent heat resistance.

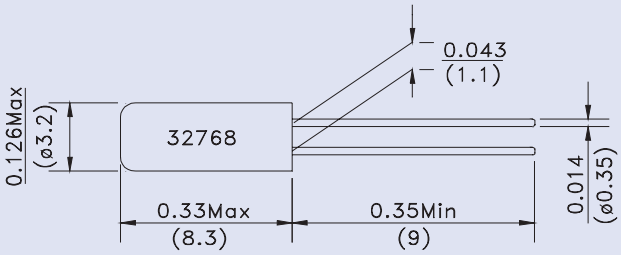
APPLICATIONS:

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

STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N:	AB38T Series
Nominal frequency:	**32.768kHz**
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.(see option)
Temperature Coefficient:	-0.034 ± 0.006 ppm/ T²
Equivalent series resistance:	30 kΩ max.
Shunt capacitance C0:	1.60 pF typ.
Load capacitance CL:	12.5 pF typ. (see option)
Motional capacitance C1:	0.0035 pF typ.
Capacitance ratio:	4600 typ.
Quality factor:	90,000 typ.
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

OUTLINE DRAWING:



Dimensions: Inches (mm)

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

AB38T- 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

Value Added Option	
M	Formed leads

Freq. Tolerance	
1*	± 10 ppm, max
7	± 15 ppm, max

* Please contact ABRACON for availability

Packaging option	
T	Tape and Reel (1000pcs/reel)

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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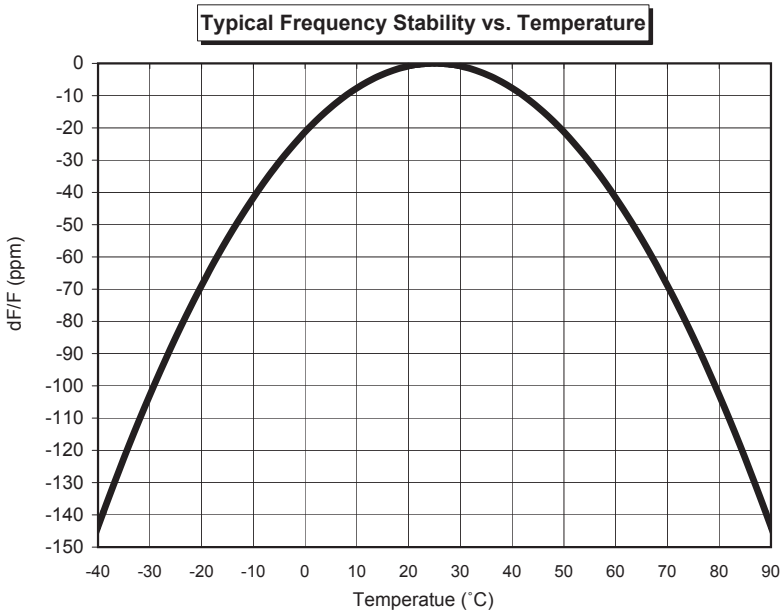
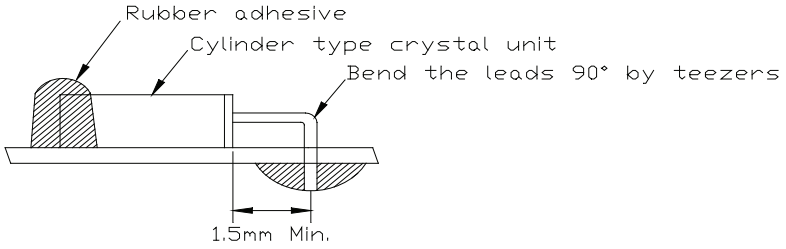
TUNING FORK CRYSTAL TEMPERATURE CURVE



HANDLING INSTRUCTIONS

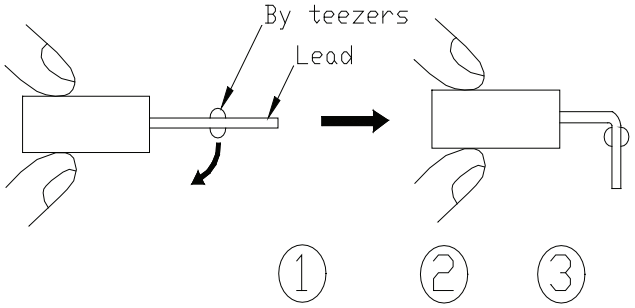
Mounting:

(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 90º by tweezers without pulling the lead strongly. Pulling the leads forcefully may cause cracks in the glass hermetic seal resulting in component failure.



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