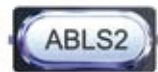


HC/49US (AT49) LOW PROFILE SURFACE MOUNT MICROPROCESSOR CRYSTAL

ABLS2



RoHS
Compliant



Reduced height
to 3.3mm

11.4 x 4.7 x 3.3 mm

Options and Part Identification

(left blank if standard)

ABLS2 - MHz - - - - -

Frequency in MHz

Please specify the frequency in MHz. e.g. 14.31818MHz

Packaging

Blank: Bulk
T: Tape&Reel

Load Capacitance (pF)

Please specify CL (Minimum 10pF) in pF or S for series

Oscillation Mode

F: Fund. AT>24MHz
FB: Fund. BT>24MHz

Custom ESR if other than standard

R□
□: Specify a value in Ω (e.g.: R40)

Operating Temp.

A: -10°C ~ +60°C
B: -20°C ~ +70°C
C: -30°C ~ +70°C
N: -30°C ~ +85°C
D: -40°C ~ +85°C
J*: -40°C ~ +105°C
K*: -40°C ~ +125°C
L*: -55°C ~ +125°C

Freq. Tolerance

H5: ± 5 ppm
1: ± 10 ppm
7: ± 15 ppm
2: ± 20 ppm
3: ± 25 ppm
4: ± 30 ppm

Freq. Stability

U**: ± 10 ppm
G: ± 15 ppm
X: ± 20 ppm
W: ± 25 ppm
Y: ± 30 ppm
H: ± 35 ppm
Q: ± 100 ppm
R: ± 150 ppm

NOTE: Fundamental BT frequency stability ± 100ppm max. at -10° C to +60° C only.

* Frequency stability ±50ppm, ±100ppm, ±150ppm only. Contact ABRACON for tighter frequency stability.

** Contact ABRACON for availability of ±10ppm with other Operating Temperature options.

11.4 x 4.7 x 3.3 mm

Reduced height to 3.3mm



RoHS
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Technical drawings of the 1000 Series 1/2" (12.7±0.6) thick plate, showing top, side, and cross-sectional views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall Width: 0.500 ± 0.024 (12.7±0.6)
- Inner Width: 0.45 ± 0.008 (11.4±0.2)
- Thickness: 0.19 ± 0.006 (4.7±0.15)

Side View Dimensions:

- Top Flange Width: 0.406 max. (10.3)
- Top Flange Thickness: 0.13 max. (3.3)

Cross-sectional View Dimensions:

- Top Flange Thickness: 0.004 max. , 0.000 min. (0.1 max.), (0.0 min.)
- Both sides
- Inner Width: 0.192 ± 0.008 (4.88±0.2)
- Thickness: $0.024 + .008 / - .004$ (0.6+0.2/-0.1)

FEEDING (PULL) DIRECTION →

0.3±.005

1.75±0.1

2.0±0.1

4.0±0.1

5° MAX

3.0±0.1

1.5±0.1

24.0±0.3

4.5±0.1

12±0.1

5.1±0.1

25.5+2/-0

2.0

2.5

120°

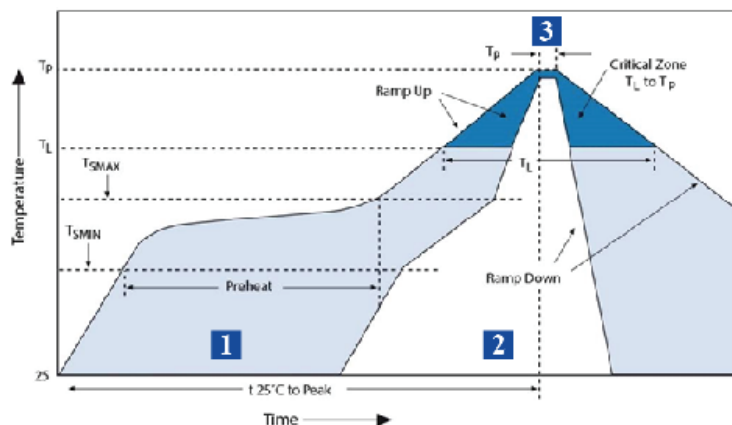
Ø13.0±0.5

Ø21.0±1

Ø1100

Ø330±1

Dimensions: mm



Zone	Description	Temperature	Time
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 180°C	60 ~ 120 sec.
2	Reflow	T_r 230°C	30 ~ 40 sec.
3	Peak Heat	T_p 260°C	10 sec. MAX

ATTENTION: Abracon 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 is required. Please contact Abracon for more information.