

HC/49US (AT49) SMD LOW PROFILE CRYSTAL



11.5 x 4.8 x 4.2 mm

ABLS



RoHS
Compliant

FEATURES:

- Suitable for reflow
- Low in height - suitable for thin equipment
- Tight stability & extended temperature

APPLICATIONS:

- Computers, Modems, Microprocessors
- Automotive and Industrial *
- Wireless Applications

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ABLS Series
Frequency	3.579545 MHz to 75 MHz
Operation Mode	AT cut (Fundamental or 3rd OT) or BT cut (See options) 3.579545MHz - 24.0MHz (Fundamental) (Standard) 24.01 - 75.00MHz (3rd- Overtone) (Standard) 24.01MHz - 50.00MHz (Fund. AT or BT) (Option. See 2.1)
Operating Temperature	0°C to +70°C (see options)
Storage Temperature	-55°C to +125°C
Frequency Tolerance at +25°C	± 50 ppm max. (see options)
Frequency Stability over the Operating Temp. (Ref to +25°C)	± 50 ppm max. (see options)
Equivalent Series Resistance	See Table 1
Shunt Capacitance C ₀	7pF max.
Load Capacitance C _L	18pF (see options)
Drive Level	1 mW max., 100µW typical
Aging at 25°C ± 3°C Per Year	± 5ppm max.
Insulation Resistance	500 MΩ min at 100Vdc ± 15V
Spurious Responses	-3dB max.
Drive level dependency (DLD)	from 1µW to 500µW (minimum 7 points tested)

TABLE 1: ESR

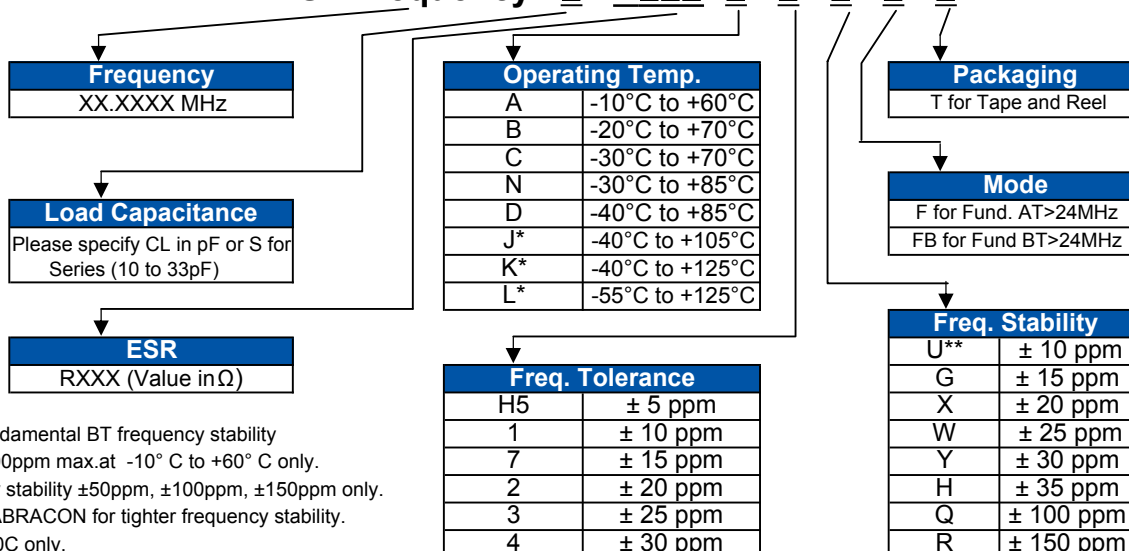
FREQUENCY (MHz)	ESR (Ω)
3.579 - 4.999 (Fund.)	180
5.000 - 5.999 (Fund.)	120
6.000 - 7.999 (Fund.)	100
8.000 - 8.999 (Fund.)	80
9.000 - 9.999 (Fund.)	60
10.000 - 15.999 (Fund.)	50
16.000 - 50.000 (Fund.)	40
24.01 - 31.999 (3rd O/T)	100
32.000 - 75.00 (3rd O/T)	80

- Change in frequency (Maximum - Minimum) over DLD range < ±10ppm
- Change in ESR (Maximum - Minimum) over DLD range < 25% of Max ESR value
- Maximum ESR over DLD range < Max ESR value

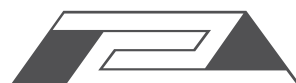
OPTIONS & PART IDENTIFICATION:

[Left blank if standard]

ABLS - Frequency - - R - - - - - -



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.
** -10 to +60C only.



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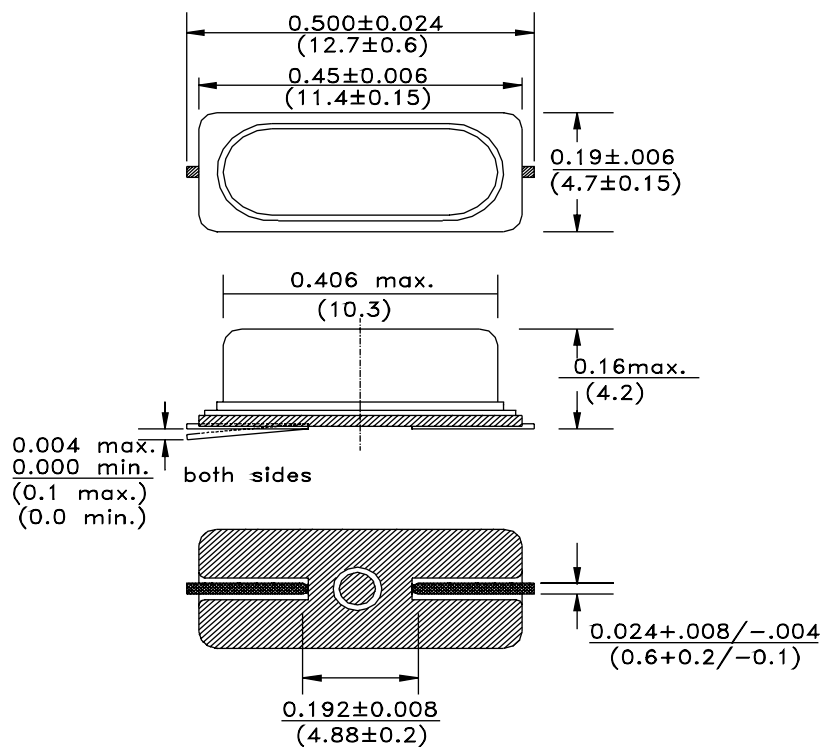
11.5 x 4.8 x 4.2 mm

ABLS

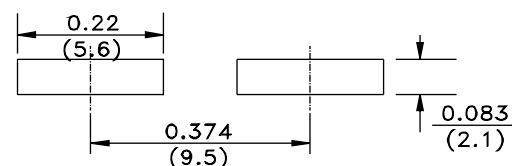


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OUTLINE DRAWING:

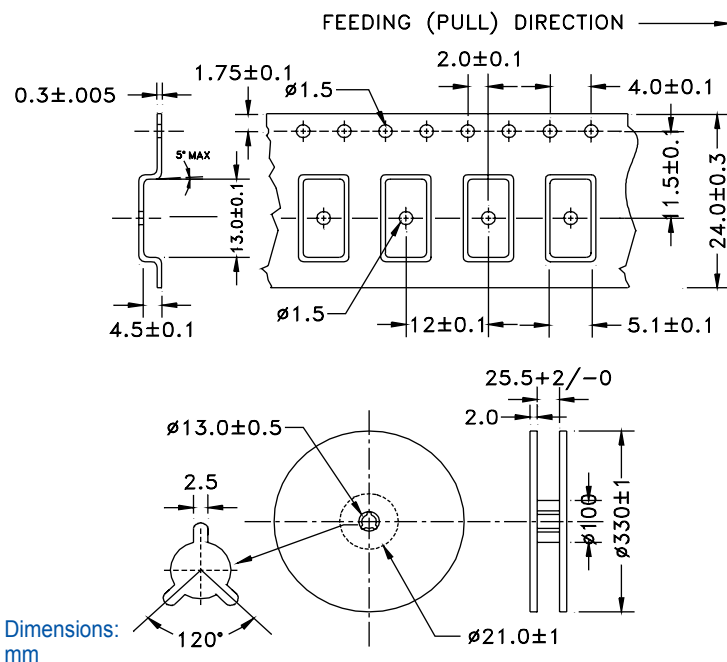


Recommended land pattern



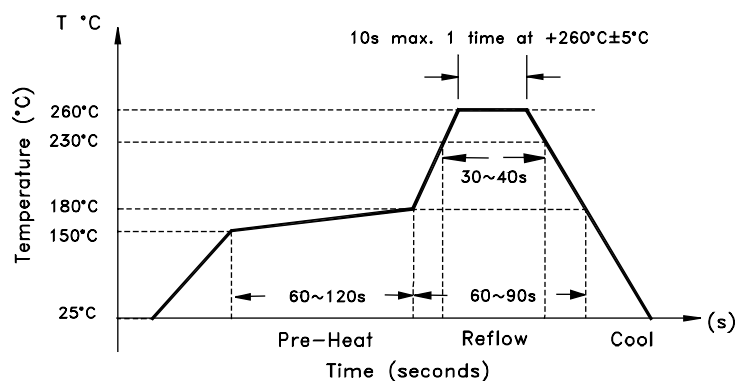
Dimensions: Inches (mm)

TAPE & REEL:



Dimensions:
mm

REFLOW PROFILE:



Need a test socket for the ABLS series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, click here. **P/N: AXS-1147-02-02**

*** NOTE:** Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



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