

HC/49US (AT49) SMD LOW PROFILE CRYSTAL



11.5 x 4.7 x 4.2 mm

ABLS



RoHS
Compliant

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable

FEATURES:

- Suitable for RoHS reflow
- Available for tight stability & extended temperature range

APPLICATIONS:

- Computers, Modems, Microprocessors
- Wireless Applications

STANDARD SPECIFICATIONS:

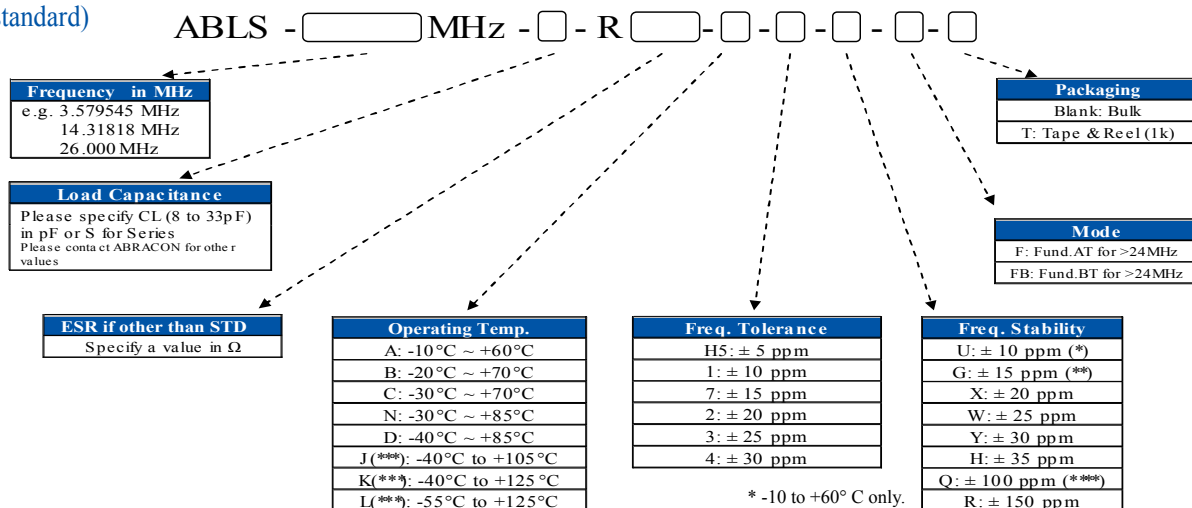
| PARAMETERS | |
|---|---|
| ABRACON P/N | ABLS Series |
| Frequency | 3.579545 MHz to 75 MHz |
| Operation Mode | AT cut (Fundamental or 3rd OT) or BT cut (See options) 3.579545MHz - 24.0MHz (Fundamental: Standard) 24.01MHz - 75.00MHz (3rd- Overtone: Standard) 24.01MHz - 50.00MHz (Fund. AT or BT: See options) |
| 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., 100 μW typical |
| Aging at 25°C (first year) | ± 5ppm max. |
| Insulation Resistance | 500 MΩ min at 100Vdc ± 15V |
| Spurious Responses | -3dB max. |
| Drive level dependency (DLD) | from 1 μW to 500 μW (minimum 7 points tested) |

TABLE 1: STANDARD ESR

| FREQUENCY (MHz) | ESR (Ω) MAX |
|--------------------------|-------------|
| 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 |

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)



* -10 to +60° C only.

** Option A, B, and 0 to +70° C only.

*** Frequency stability ±50ppm, ±100ppm, or ±150ppm only.

Contact ABRACON for tighter frequency stability.

**** For Fundamental BT, frequency stability

± 100ppm max. at -10° C to +60° C only.

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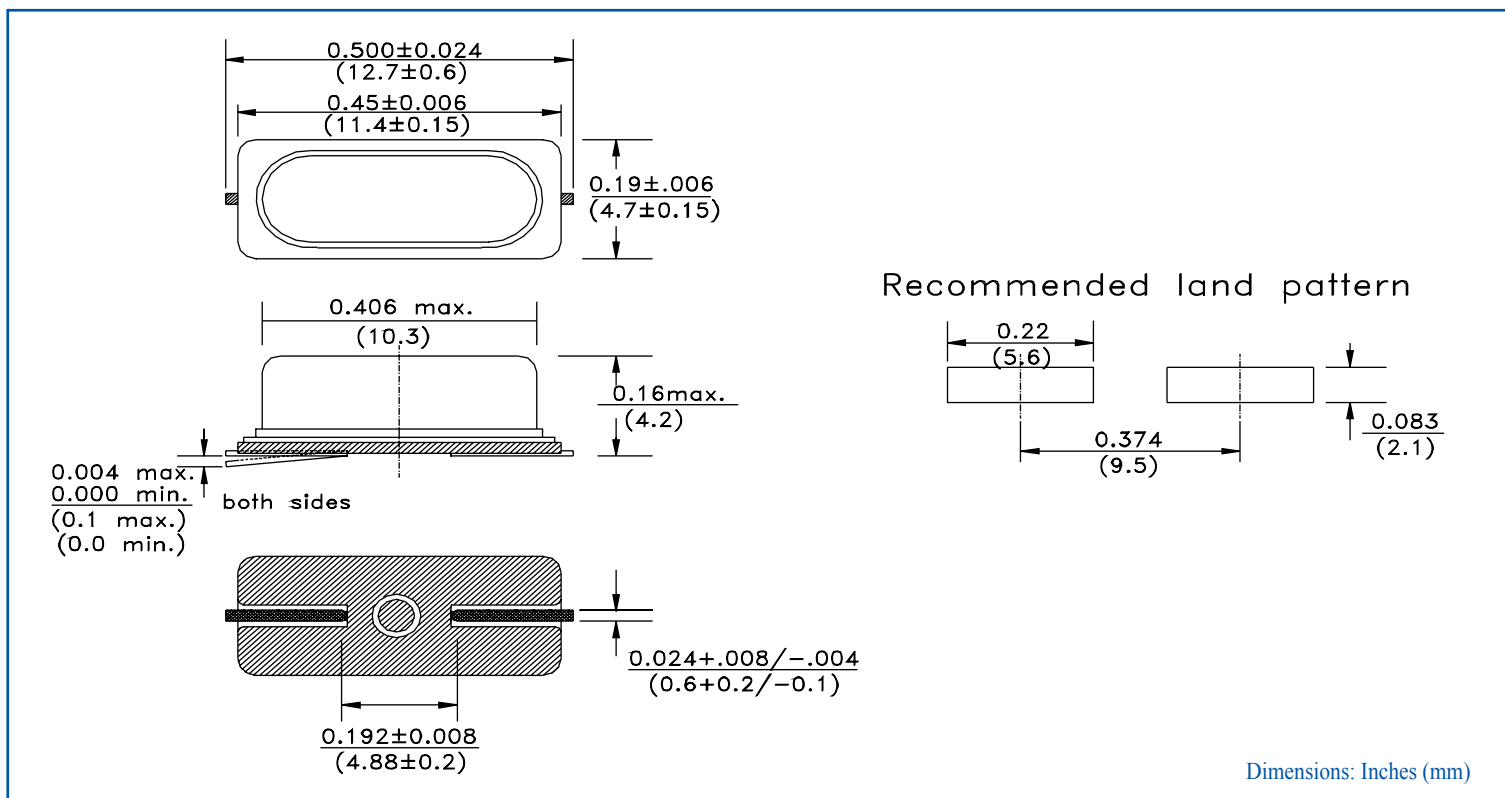
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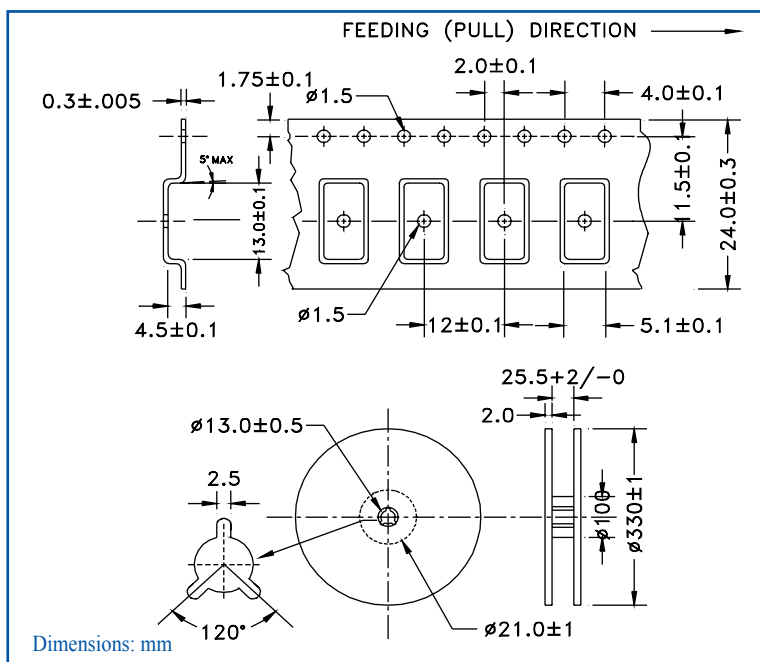


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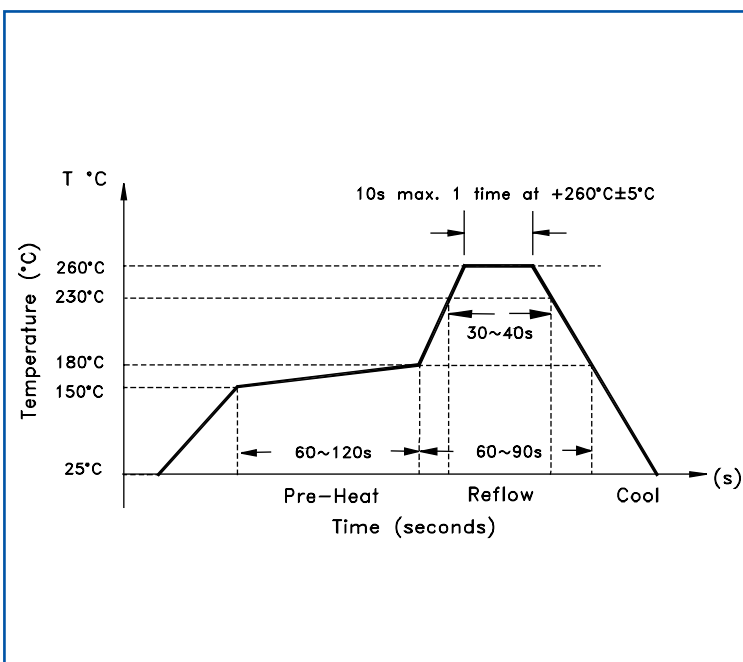
OUTLINE DRAWING:



TAPE & REEL:



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](#)

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.

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