



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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:

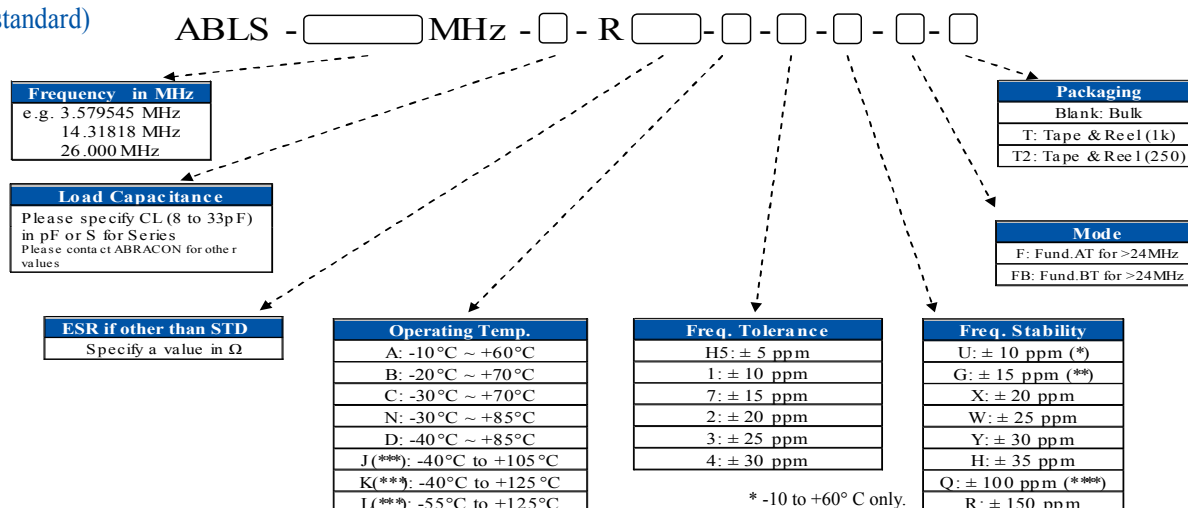
| PARAMETERS | |
|---|---|
| ABRACON P/N | ABLS Series |
| Frequency | 3.579545 MHz to 75 MHz |
| Operation Mode | AT cut (Fundamental or 3rd OT) or BT cut (See options) 3.579545MHz - 24.0MHz (Fundamental: Standard) 24.01MHz - 75.00MHz (3rd- Overtone: Standard) 24.01MHz - 50.00MHz (Fund. AT or BT: See 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.

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Revised: 04.07.11

HC/49US (AT49) SMD LOW PROFILE CRYSTAL

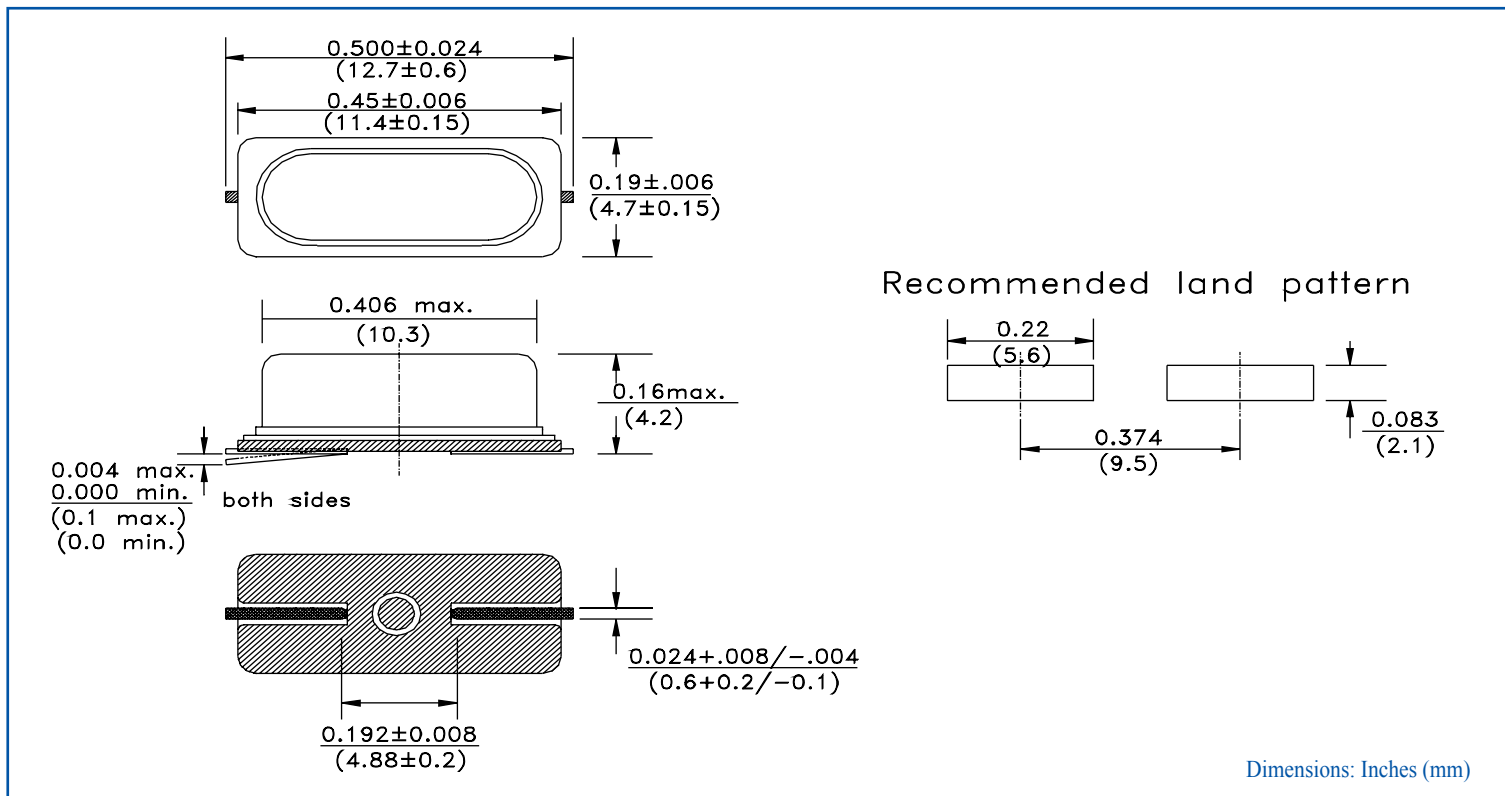


11.5 x 4.7 x 4.2 mm

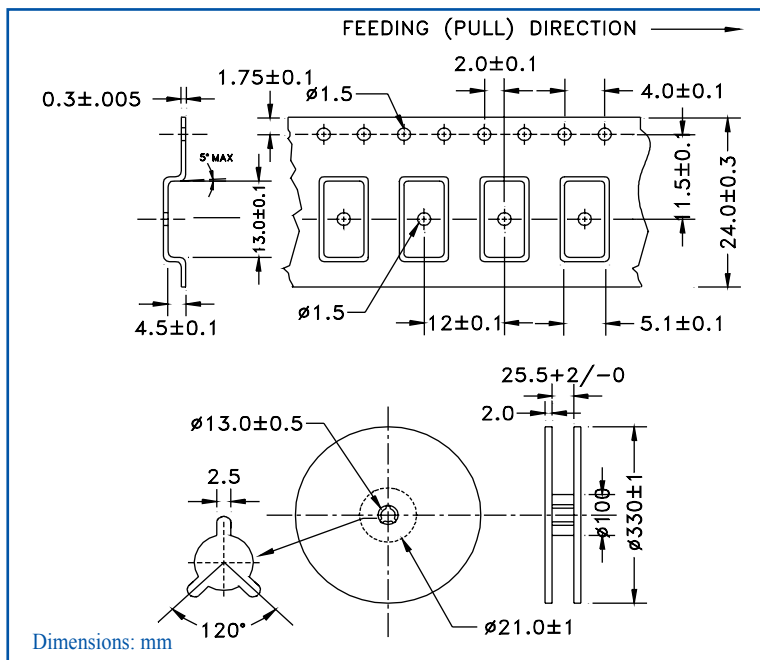
ABLS

Pb RoHS Compliant

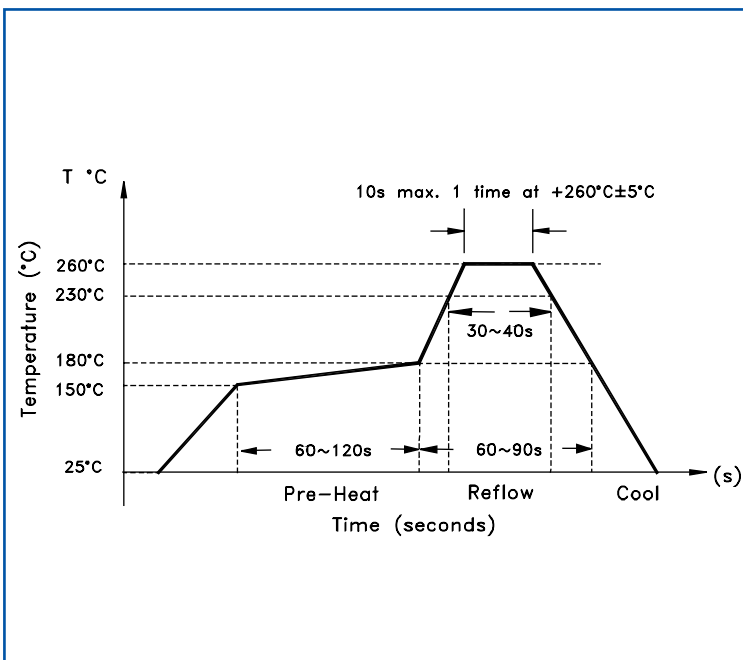
OUTLINE DRAWING:



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.

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale
 30332 Esperanza, Rancho Santa Margarita, California 92688
 tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

Revised: 04.07.11