

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

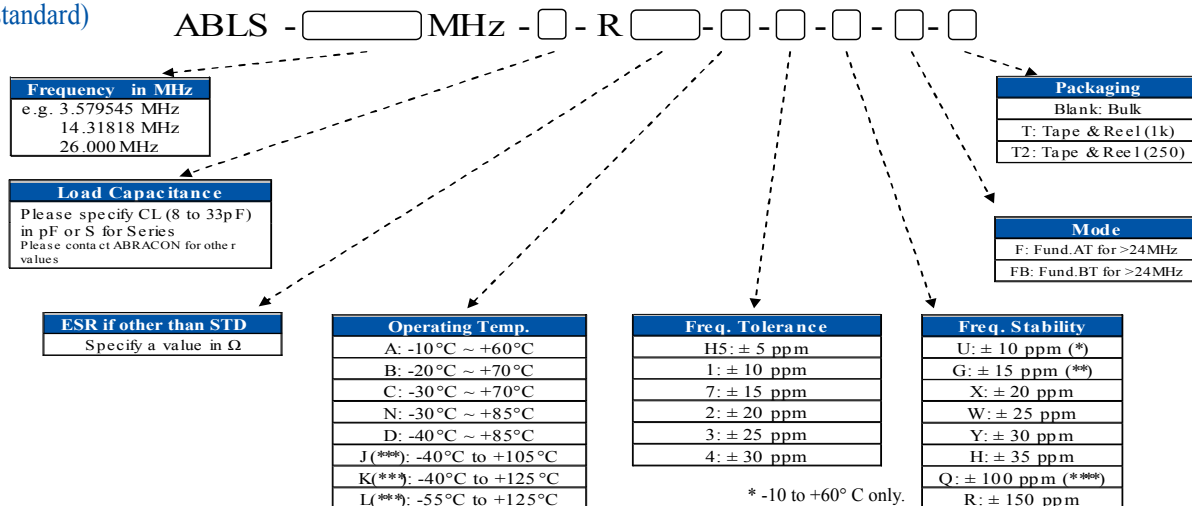
ABRACON P/N	ABLS Series
Frequency	3.579545 MHz to 75 MHz
Operation Mode	AT cut (Fundamental or 3rd OT) or BT cut (See options) 3.579545MHz - 24.0MHz (Fundamental: Standard) 24.01MHz - 75.00MHz (3rd- Overtone: Standard) 24.01MHz - 50.00MHz (Fund. AT or BT: See options)
Operating Temperature	0°C to + 70°C (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

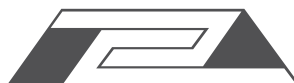
OPTIONS & PART IDENTIFICATION:

(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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON:

[ABLS-14.7456MHZ-B2-T](#) [ABLS-3.579545MHZ-B2-T](#) [ABLS-5.000MHZ-B2-T](#) [ABLS-16.000MHZ-B2-T](#) [ABLS-13.941MHz-10-R20](#) [ABLS-4.9152MHZ-B2-T](#) [ABLS-12.288MHZ-B2-T](#) [ABLS-4.000MHZ-B2-T](#) [ABLS-32.000MHZ-B2-T](#) [ABLS-18.432MHZ-B2-T](#) [ABLS-3.6864MHZ-B2-T](#) [ABLS-9.7941MHz-10-R20](#) [ABLS-11.0592MHZ-B2-T](#) [ABLS-8.000MHZ-B2-T](#) [ABLS-24.000MHZ-B2-T](#) [ABLS-8.192MHZ-B2-T](#) [ABLS-10.000MHZ-B2-T](#) [ABLS-48.000MHZ-B2-T](#) [ABLS-7.1240MHZ-10-R70](#) [ABLS-22.1184MHZ-B2-T](#) [ABLS-4.897MHz-20-R70-D](#) [ABLS-9.84375MHz-10-R20-DT](#) [ABLS-12.000MHZ-B2-T](#) [ABLS-49.152MHZ-B2-T](#) [ABLS-20.000MHZ-B2-T](#) [ABLS-13.560MHz-10-R30-D-T](#) [ABLS-6.7470MHz-10-R70](#) [ABLS-6.7458MHz-20-R60-D](#) [ABLS-19.6608MHZ-B2-T](#) [ABLS-19.2000MHZ-10-R010-A-7-G-F-T](#) [ABLS-7.1323MHz-10-R70](#) [ABLS-7.3728MHZ-B2-T](#) [ABLS-14.31818MHZ-B2-T](#) [ABLS-48.000-18-40-B-4-H-F-T](#) [ABLS-24.576MHZ-B2F-T](#) [ABLS-25.000MHZ-B2F-T](#) [ABLS-27.000MHZ-B2F-T](#) [ABLS-13.491MHz-10-R20](#) [ABLS-3.6864MHZ-D](#) [ABLS-LR-24.000MHZ-B-1-G-T](#) [ABLS-33.000MHZ-L4QF-T](#) [ABLS-20.000MHZ-L4Q-T](#) [ABLS-14.7456MHZ-L4Q-T](#) [ABLS-13.000MHZ-L4Q-T](#) [ABLS-3.579545MHZ-K4T](#) [ABLS-4.096MHZ-L4Q-T](#) [ABLS-18.432MHZ-K4T](#) [ABLS-22.1184MHZ-L4Q-T](#) [ABLS-25.000MHZ-L4QF-T](#) [ABLS-27.000MHZ-K4F-T](#) [ABLS-15.000MHZ-L4Q-T](#) [ABLS-11.0592MHZ-K4T](#) [ABLS-14.7456MHZ-K4T](#) [ABLS-40.000MHZ-K4F-T](#) [ABLS-11.0592MHZ-L4Q-T](#) [ABLS-4.096MHZ-K4T](#) [ABLS-24.576MHZ-K4F-T](#) [ABLS-7.3728MHZ-K4T](#) [ABLS-16.384MHZ-K4T](#) [ABLS-20.000MHZ-K4T](#) [ABLS-12.000MHZ-K4T](#) [ABLS-9.8304MHZ-K4T](#) [ABLS-26.000MHZ-L4QF-T](#) [ABLS-4.000MHZ-L4Q-T](#) [ABLS-4.9152MHZ-K4T](#) [ABLS-27.000MHZ-L4QF-T](#) [ABLS-6.144MHZ-K4T](#) [ABLS-6.144MHZ-L4Q-T](#) [ABLS-22.1184MHZ-K4T](#) [ABLS-4.9152MHZ-L4Q-T](#) [ABLS-40.000MHZ-L4QF-T](#) [ABLS-16.000MHZ-K4T](#) [ABLS-13.000MHZ-K4T](#) [ABLS-33.000MHZ-K4F-T](#) [ABLS-30.000MHZ-L4QF-T](#) [ABLS-12.000MHZ-L4Q-T](#) [ABLS-24.576MHZ-L4QF-T](#) [ABLS-9.8304MHZ-L4Q-T](#) [ABLS-3.6864MHZ-K4T](#) [ABLS-18.432MHZ-L4Q-T](#) [ABLS-14.31818MHZ-K4T](#) [ABLS-16.384MHZ-L4Q-T](#) [ABLS-14.31818MHZ-L4Q-T](#) [ABLS-5.000MHZ-L4Q-T](#) [ABLS-32.000MHZ-K4F-T](#) [ABLS-36.000MHZ-K4F-T](#) [ABLS-36.000MHZ-L4QF-T](#) [ABLS-3.579545MHZ-L4Q-T](#) [ABLS-25.000MHZ-K4F-T](#) [ABLS-8.000MHZ-L4Q-T](#) [ABLS-32.000MHZ-L4QF-T](#) [ABLS-12.288MHZ-K4T](#) [ABLS-24.000MHZ-K4F-T](#) [ABLS-16.000MHZ-L4Q-T](#) [ABLS-6.000MHZ-L4Q-T](#) [ABLS-24.000MHZ-L4QF-T](#) [ABLS-8.192MHZ-K4T](#) [ABLS-19.6608MHZ-L4Q-T](#) [ABLS-12.288MHZ-L4Q-T](#) [ABLS-3.6864MHZ-L4Q-T](#)