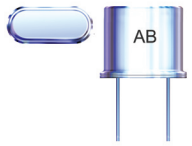
HC49/U, HC51/U Crystal

AB



11.5 x 5.0 x 13.46mm

Pb RoHS Compliant

FEATURES:

- High precision availability
- Resistance welded
- Ideal for large pullability application
- Wide frequency range

APPLICATIONS:

- CPU, Memory
- Computer, printer
- Data communication (1MHz)
- Data input - output machine (1MHz)

STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	1.8432		60.000	MHz	HC49/U
	0.850		1.800	MHz	HC51/U
Operation Mode	Fundamental				0.850MHz – 24.000MHz
	3rd Overtone				24.01MHz – 66.00MHz
	5th Overtone				66.01MHz – 122.00MHz
	7th Overtone				122.01MHz – 160.00MHz
Operating Temperature	0		+70	ºC	See options
Storage Temperature	-55		+125	ºC	
Frequency Tolerance @+25ºC	-50		+50	ppm	See options
Frequency Stability over the operating temperature (ref. to +25ºC)	-100		+100	ppm	See options
Equivalent series resistance (R1)	See table 1 below			Ω	
Shunt capacitance (C0)			7	pF	
Load capacitance (CL)		18		pF	See options
Drive Level		100	1000	µW	
Aging@25ºC±3ºC			±5	ppm	First year
Insulation Resistance	500			M Ω	@100Vdc±15V
Drive level dependency (DLD), minimum 7 points tested: from 1µW to 500µW.	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.				

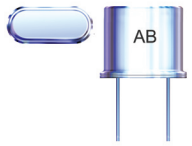
Table 1

FREQUENCY (MHz)	Operation Mode	ESR (Ω) max
1.000-1.799	HC49/U Fundamental	2000
1.800-1.999		750
2.000-2.399		550
2.400-2.999		350
3.000-3.699		200
3.700-4.199		100
4.200-4.899		70
4.900-5.999		50
6.000-7.999		40
8.000-9.999		35
10.000-12.499		30
12.50-50.00		25
24.00-66.00	HC49/U (3rd OT)	40
66.01-122.00	HC49/U (5th OT)	80
122.01-160.00	HC49/U (7th OT)	120
0.850-0.899	HC51/U Fundamental	1000
0.900-1.5		800

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

HC49/U, HC51/U Crystal

AB



11.5 x 5.0 x 13.46mm

Pb RoHS Compliant

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

AB - [ ] MHz - [ ] - [ ] - [ ][ ][ ] - [ ] - [ ] - [ ] - [ ]

Frequency in MHz
Please specify the frequency in xx.xxxxMHz.
e.g. 14.3181MHz

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

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

Freq. Tolerance

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

Freq. Stability

Options for AT-Cut only*
U**: ± 10 ppm
G: ± 15 ppm
X: ± 20 ppm
W: ± 25 ppm
Y: ± 30 ppm
H: ± 35 ppm
Z: ± 50 ppm

Operation Mode

F	Fund. AT > 24MHz
FB	Fund. BT>24MHz
O	3rd OT>66MHz

Value Added

I	Insulator Tab
V	Vinyl Sleeve
QXX	Trimmed leads See Table 2
MJ	Metal jacket

Quality Factor***

QXXXk	Minimum Value

Packaging
T: Tape & Reel

NOTE:
*:Frequency Stability ±100 ppm maxat -10 to +60C only for BT cut.
**: -10 to +60C only.
***: Quality factor must be accompanied by a k value

Table 2

CODES	TRIMMED L in(mm)
Q45	0.45 (11.43)
Q40	0.40 (10.16)
Q35	0.35 (8.89)
Q30	0.30 (7.62)
Q25	0.25 (6.35)
Q20	0.20 (5.08)
Q15	0.15 (3.81)
Q10	0.10 (2.54)
Q115	0.115 (2.92)

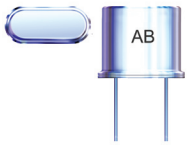
NOTE: Use appropriate code numbers for other trimmed lengths not listed.
(e.g. Q14 for 0.14 inch (3.55 mm))

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

HC49/U, HC51/U Crystal

AB

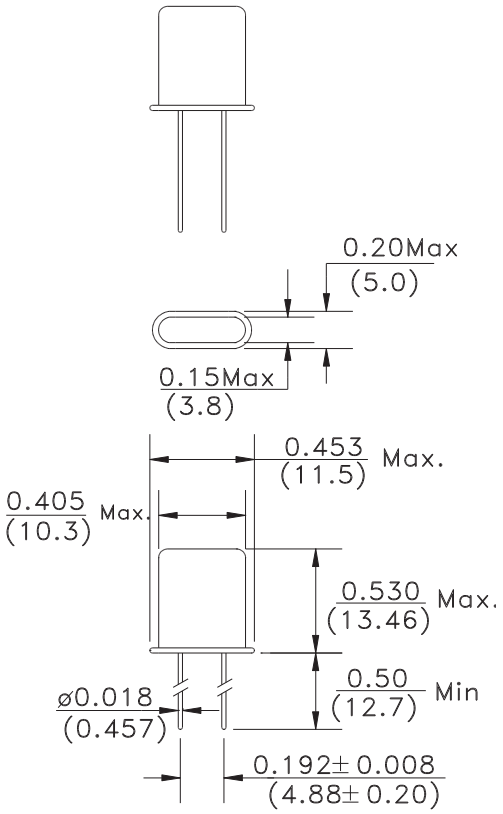
Pb RoHS Compliant



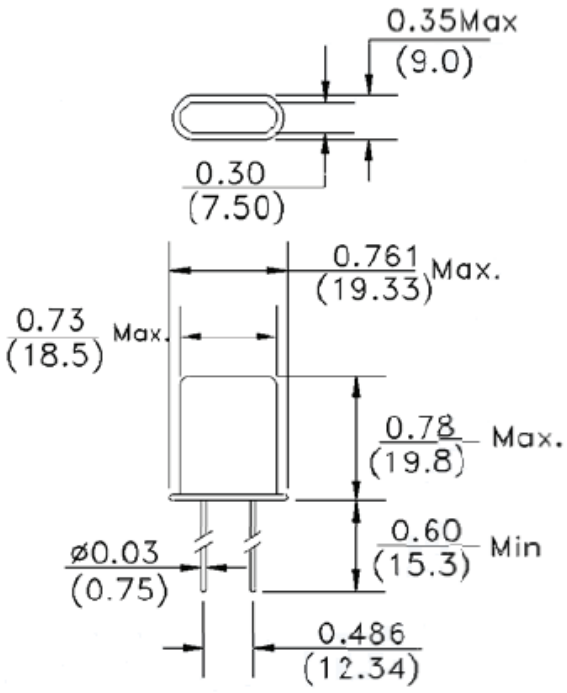
11.5 x 5.0 x 13.46mm

OUTLINE DRAWING:

HC49U:



HC51U:

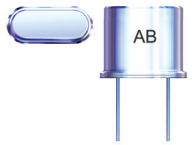


Dimensions: inch (mm)

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

HC49/U, HC51/U Crystal

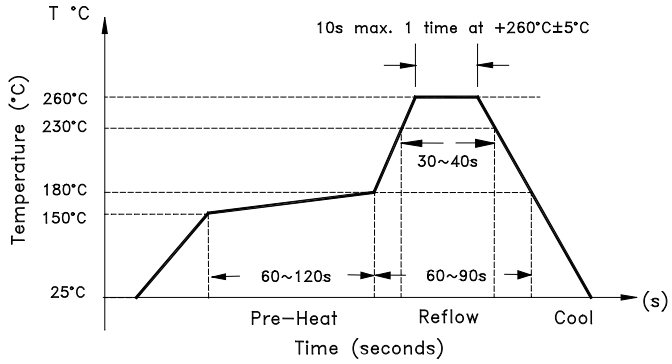
AB



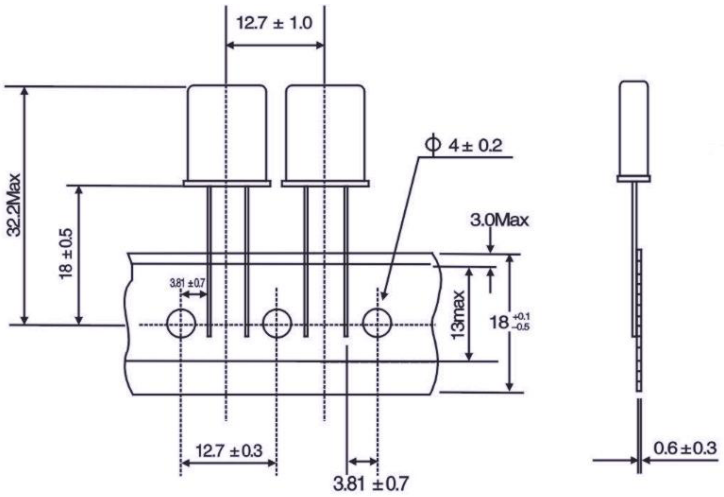
11.5 x 5.0 x 13.46mm

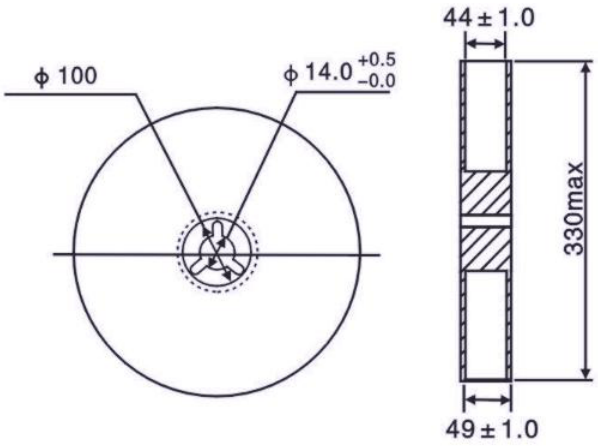
Pb RoHS Compliant

REFLOW PROFILE:



TAPE & REEL: T 1,000 pcs/reel





Dimensions: mm

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.

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

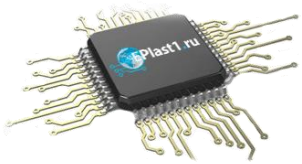
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.