HC/49US (AT49) 3RD LEAD CASE-GROUNDED SMD LOW PROFILE CRYSTAL







11.4 x 4.7 x 4.2mm

> FEATURES:

- 3rd Lead is Grounded, Ideal for EMI Sensitive Applications
- IR-reflow capable
- Low height reduced to 4.2mm
- Tight stability & extended temperature available

> APPLICATIONS:

- EMI sensitive applications
- · Computers, Modems, Microprocessors
- Medical Electronics
- Wireless Applications

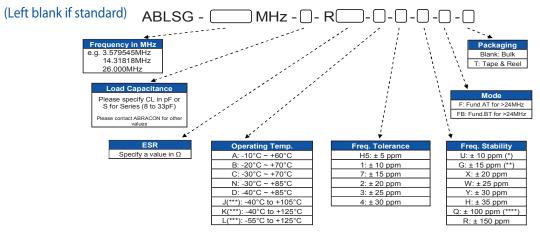
STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ABLSG Series
Frequency	3.579545 MHz to 75 MHz
Operation Mode	AT cut (Fundamental or 3rd OT) or BT cut 3.579545MHz - 24.0MHz (Fundamental: Standard) 24.01 - 75.00MHz (3rd- Overtone: Standard) 24.01MHz - 50.00MHz (Fund. AT or BT: Please specify. See options)
Operating Temperature	0°C to + 70°C (see options)
Storage Temperature	- 55°C to + 125°C
Frequency Tolerance	± 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 C₀	7pF max.
Load Capacitance C _∟	18pF (see options)
Drive Level	1 mW max., 100μW typical
Aging at 25°C Per Year	± 5ppm max.
Insulation Resistance	500 M Ω 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 - 70.00 (3rd O/T)	80

OPTIONS & PART IDENTIFICATION:



- * 10 to +60C only.
- ** Option A, E, B, and 0 to +70C only.
- *** Frequency stability ±50ppm, ±100ppm, ±150ppm only.
 - Contact ABRACON for tighter frequency or stability requirement.
- **** For Fundamental BT, frequency stability ±100ppm max. at 10°C to +60°C only.





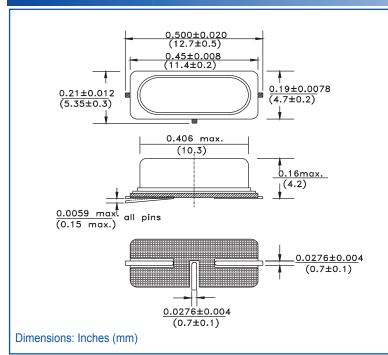
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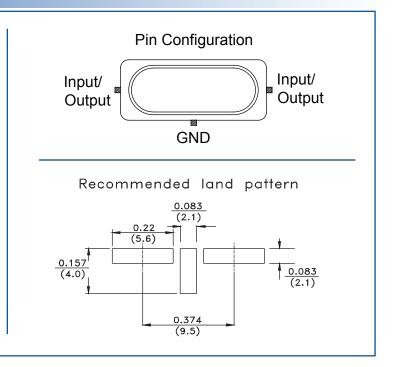
ABLSG





OUTLINE DRAWING:

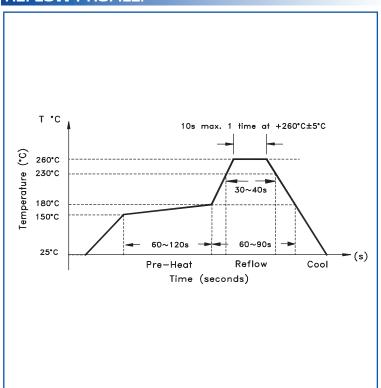




> TAPE & REEL:

Φ:1.5+0.1 Φ:1.5+0.1 Φ:2.0±0.3 Φ:2.0±0.5 Po:12.0±0.1 Δο 1.5 5.0±0.1(8) 25.5+2/-0 2.0 Φ:2.0±0.5 Dimensions: mm

REFLOW PROFILE:



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.

