

THE DATASHEET OF ABLSG-4.000MHZ-D2Y-T

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





ABLSG

RoHS Compliant

11.4 x 4.7 x 4.2mm

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

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

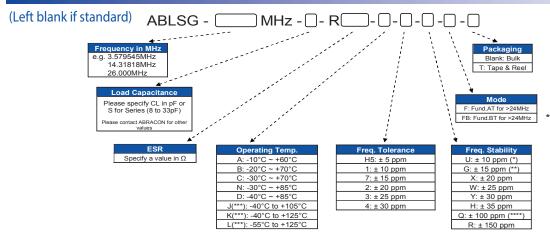
STANDARD SPECIFICATIONS:

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

TABLE II. LOIK		
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.





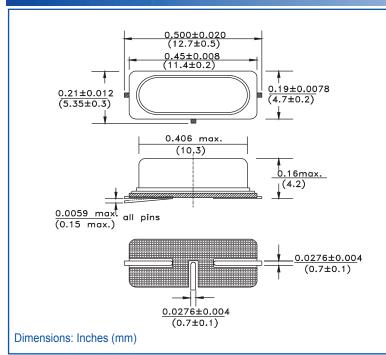
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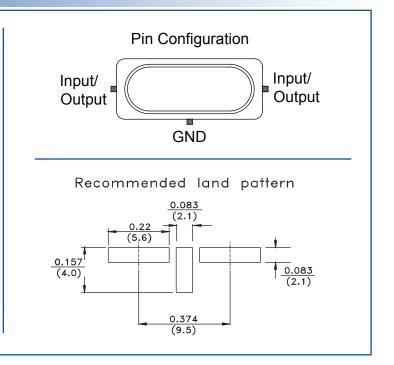
ABLSG





OUTLINE DRAWING:

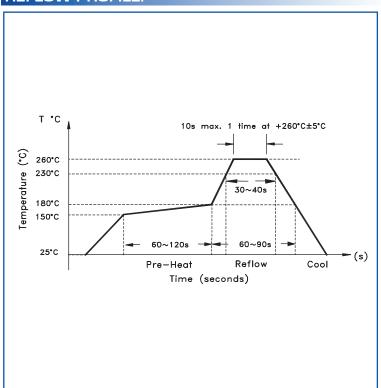




> TAPE & REEL:

Φ:1.5+0.1 2.0(1) 4.0(2) 1.76±0.2 1.76±0.2 1.1.5 (1) 24.0±0.3 Po:12.0±0.1 Ao 1.5 5.0±0.1(8) 25.5+2/-0 2.0 2.5 4.0(2) 1.76±0.2 1.76

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.

