

# MICROPROCESSOR CRYSTALS

## AT49 (HC49 US) LOW PROFILE SURFACE-MOUNT

# ABLS3

### FEATURES:

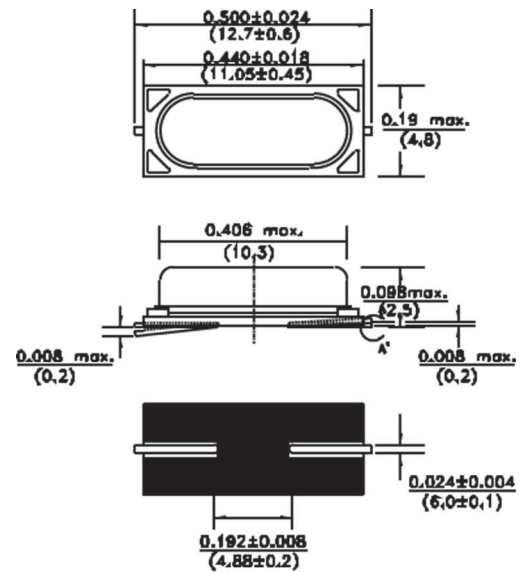
- High reliability, Low cost.
- Tight stability and extended temperature.
- Low Profile (2.5mm max.)
- Reflow capable.

### APPLICATIONS:

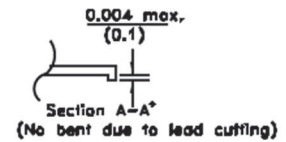
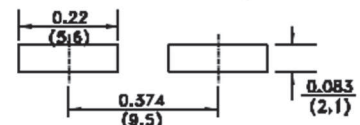
- Blue-tooth and wireless applications.
- Computers, modems, communications.
- Automotive and industrial.
- Hi-precision TCXO and clock applications.

### STANDARD SPECIFICATIONS

Frequency Range	<b>3.579545 MHz - 65.00 MHz</b>
Operation Mode	3.579545 MHz ~ 24.0 MHz ~ Fundamental 24.01 MHz ~ 40.32MHz ~ Fund. AT or BT 24.01 MHz ~ 65 MHz ~ Third- Overtone
Operating Temperature	0°C to + 70°C (See Options)
Storage Temperature	-40°C to + 85°C
Frequency Tolerance @ 25°C	± 50 ppm max. (See Options)
Frequency stability over temp.	±50 ppm max. (See Options)
Equivalent Series Resistance (ESR)	180 Wmax. for 3.579545MHz- 3.999MHz 150 Wmax. for 4.000MHz - 4.999MHz 120 Wmax. for 5.000MHz - 5.999MHz 100 Wmax. for 6.000MHz - 6.999MHz 80 Wmax. for 7.000MHz - 8.999MHz 60 Wmax. for 9.000MHz - 12.999MHz 50 Wmax. for 13.00MHz - 19.999MHz 40 Wmax. for 20.00MHz - 40.320MHz
Fundamental	
Third Overtone	80 Wmax. for 24.01 MHz - 65.00MHz
Shunt Capacitance C <sub>0</sub>	7pF max.
Load Capacitance C <sub>L</sub>	18pF (See Options)
Drive Level	1mW max., 100 mW correlation
Aging @ 25°C per Year	± 5 ppm max.
Insulation Resistance:	500M Wmin. at 100 Vdc ± 15V



### Recommended land pattern



Dimensions: Inches (mm)

### ORDERING OPTIONS

ABLS3 - Frequency - CL - ESR - Temperature - Tolerance - Stability - Mode - Packaging

XX.XXXX MHz	RXXX (value in V <sub>y</sub> )	-H5 for ± 5ppm(*) -1 for ± 10 ppm -7 for ± 15 ppm -2 for ± 20 ppm -3 for ± 25 ppm -4 for ± 30ppm	-R5 for ± 5ppm(*) -U for ± 10ppm -X for ± 20ppm -W for ± 25ppm -Y for ± 30ppm -H for ± 35ppm	-T for tape and reel
Load cap.in pF or -S for Series	-A for -10°C to + 60°C -B for -20°C to + 70°C -C for -30°C to + 70°C -N for -30°C to + 85°C -D for -40°C to + 85°C			-F for Fundamental AT > 24MHz -FB for Fundamental BT > 24MHz (**)

(\*\*) BT cut ±100ppm max. -10°C to +60°C

(\*) Call for details.



NOTE: Left blank if standard • All specifications and markings subject to change without notice

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