

11.5 x 5.0 x 13.5 mm

WIDE FREQUENCY RANGE • LOW COST • HC49/U

MICROPROCESSOR CRYSTALS

AB



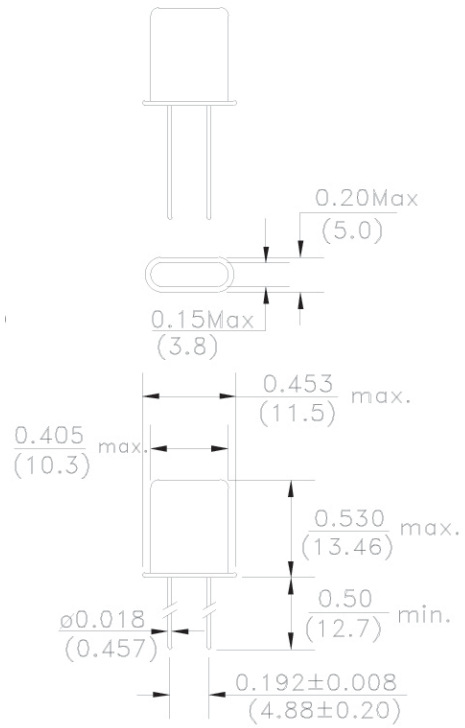
RoHS Directive
2002/95/EC Compliant

FEATURES:

- Height 13.5 mm.
- High precision availability.
- Resistance welded.
- Good for high pullability.

STANDARD SPECIFICATIONS

Frequency Range	850kHz - 1.500MHz (HC 51/U) * 1.0MHz & 1.8432MHz - 160MHz (HC49/U)
Operation Mode	850KHz ≤ F ≤ 50.0MHz (Fundamental) 24.0MHz < F ≤ 66.0MHz (3rd OT) 66.0MHz < F ≤ 122MHz (5th OT) 122.0MHz < F ≤ 160MHz (7th OT)
Operating Temperature	0°C to +70°C (See Options)
Storage Temperature	-55°C to +125°C
Frequency Tolerance @ 25°C	±50ppm max. (See Options)
Frequency Stability over Temp.	±100ppm max. (See Options)
Equivalent Series Resistance (ESR)	2000 Ω max. for 1.0MHz ≤ F < 1.8MHz 750 Ω max. for 1.8MHz ≤ F < 2.0MHz 550 Ω max. for 2.0MHz ≤ F < 2.4MHz 350 Ω max. for 2.4MHz ≤ F < 3.0MHz 200 Ω max. for 3.0MHz ≤ F < 3.7MHz 100 Ω max. for 3.7MHz ≤ F < 4.2MHz 70 Ω max. for 4.2MHz ≤ F < 4.9MHz 50 Ω max. for 4.9MHz ≤ F < 6.0MHz 40 Ω max. for 6.0MHz ≤ F < 8.0MHz 35 Ω max. for 8.0MHz ≤ F < 10.0MHz 30 Ω max. for 10.0MHz ≤ F < 12.5MHz 25 Ω max. for 12.5MHz ≤ F < 50.00MHz
Fundamental - HC49/U	
Fundamental - HC51/U	1000 Ω max. for 850kHz ≤ F < 900kHz 800 Ω max. for 900kHz ≤ F ≤ 1.500MHz
3rd Overtone	40 Ω max. for 24.0MHz ≤ F ≤ 66MHz
5th Overtone	80 Ω max. for 66.0MHz < F ≤ 122MHz
7th Overtone	120 Ω max. for 122.0MHz < F ≤ 160MHz
Shunt Capacitance C ₀	7pF max.
Load Capacitance C _L	18pF (See Options)
Drive Level	1mW max, 100μW correlation
Aging @ 25°C per Year	±5ppm max. (tighter aging available)
Insulation Resistance	500M Ω min. at 100Vdc ±15V



Dimensions: Inches (mm)

Environmental, and mechanical specifications, see appendix C. Group 1. Marking, see appendix G. Application notes, see appendix A. * Please, see outline dimensions of HC51/U and Value added, see appendix D.

ORDERING OPTIONS

AB - Frequency - CL - ESR - Temperature - Tolerance - Stability - Mode - Value Added - Packaging

XX.XXX MHz or kHz	RXXX (value in Ω)	-1 for ± 10ppm -7 for ± 15ppm -2 for ± 20ppm -3 for ± 25ppm -4 for ± 30ppm	-U for ± 10ppm -G for ± 15ppm -X for ± 20ppm -W for ± 25ppm -Y for ± 30ppm -H for ± 35ppm -Z for ± 50ppm	- I (Insulator Tab) - L (3rd Lead welded) - V (Vinyl Sleeve) - L1 (3rd Lead Soldered) - L2 (Middle 3rd Lead) - L3 (Side Welded 3rd Lead) - M (SMT Formed Leads) - MJ (Metal Jacket) - QXX (Trimmed Leads)	- T (Tape & Reel) - P (Foam) - TY (Tray Packing)
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 (Fundamental AT > 24MHz) -FB (Fundamental BT > 24MHz)** -0 (3rd OT > 66MHz)			

** ±100ppm max. stability from -10°C. to 60°C only.

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



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