

2.5Vdc • HCMOS/ TTL COMPATIBLE FULL-SIZE AND HALF-SIZE DIP

CRYSTAL CLOCK OSCILLATORS

ACOL1 and ACHL1

FEATURES:

- Tristate Enable/Disable option.
- HCMOS and TTL compatible.
- Anti-Static packaging tubes.
- Low voltage 2.5Vdc.
- Tight symmetry option.
- Low power.

APPLICATIONS:

- Clock signal sources for digital chips and microprocessors.
- Low power applications.

STANDARD SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Package Type	ACOL1 (14 DIP) and ACHL1 (8 DIP)
Frequency Range (F_0)	1.00MHz - 85.0MHz
Operating Temperature (T_{OPR})	0°C to +70°C (See Options)
Storage Temperature (T_{STO})	-55°C to +125°C
Frequency Stability ($\Delta F/F_0$)	±100ppm max. (See Options)
Supply Voltage (V_{dd})	2.5Vdc ±10%
Input Current (I_{dd})	15mA max.
Duty Cycle or Symmetry	40 / 60% max. (typical 45/55%) (See Options)
Rise and Fall Times (T_R / T_F)	10ns max.
Output Load	5TTL or 15pF
Output Voltage	0.9 * V_{dd} min. (V_{OH}) 0.1 * V_{dd} max. (V_{OL})
Start-up Time (T_{OSC})	10ms max.
Tristate Function (V_{IH})	"1" or Open: Oscillation $\geq 1.8V$
(Option "-A" ONLY) (V_{IL})	"0": Output disabled in high impedance (HiZ) < 0.4V
Output Disable / Enable Time	100ns max. (for Option "-A" ONLY)

* Pin 1 has internal pull-up resistor which allows Pin 1 to be left floating (enable high) opt. A.
 Test circuit, waveforms, see appendix B. Recommended handling, see appendix F.
 Environmental and mechanical specifications, see appendix C. Group 1.
 Marking, see appendix G. Value added, see appendix D.
 Application notes, see appendix A.

ORDERING OPTIONS

ACXL1 - Frequency - Temperature - Overall Frequency Stability - Duty Cycle - Tristate - Value Added - Packaging

O or H	-R for ± 25ppm max -K for ± 30ppm max -H for ± 35ppm max -C for ± 50ppm max	-S for 45/55% @ 1/2V _{dd}	-T for Tape and reel -TY for Tray packing
XX.XXXXX MHz or kHz	-D for -10°C to +60°C -E for -20°C to +70°C -F for -30°C to +70°C -N for -30°C to +85°C -L for -40°C to +85°C	-A for Tristate E/D	
		-G Gull Wing -G2 Gull Wing (ACHL1) -QXX (Trimmed Leads)	

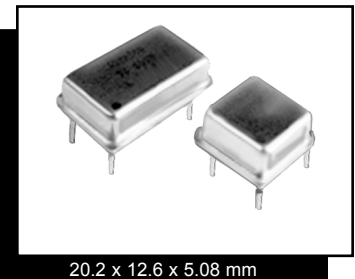
** Standard Operating Temperature Only.

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

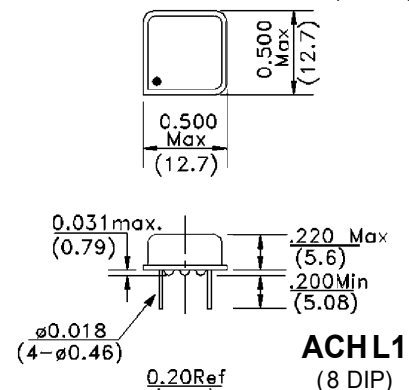
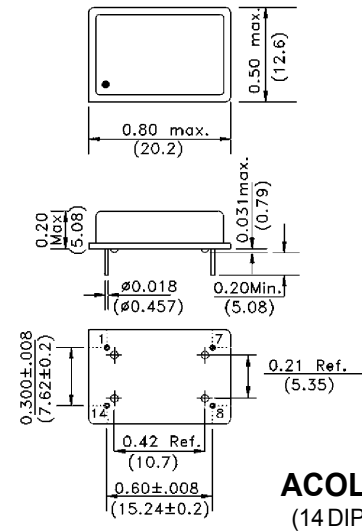
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20.2 x 12.6 x 5.08 mm



Dimensions: Inches (mm)

PIN #	PIN #	FUNCTION
ACOL	ACHL	
1	1	NC or E/D
7	4	GND / Case
8	5	Output
14	8	V _{dd}

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