

5Vdc or 3.3Vdc • FULL-SIZE and HALF-SIZE DIP • HCMOS OR TTL

PROGRAMMABLE CLOCK OSCILLATORS

ACOP and ACHP series

FEATURES:

- Wide range of frequency up to 125MHz using PLL Technology.
- Quick delivery within one to five days for small quantities.
- Tristate E / D or Stand-By function.

APPLICATIONS:

- Clocks for a wide range of applications.

1 to 5
Day Lead
Time

STANDARD SPECIFICATIONS

PARAMETERS	ACOP ACHP	ACOPT ACHPT	ACOLP ACHLP
Frequency Range (F ₀)	1.00MHz - 125MHz		1.00MHz - 106.25MHz
Operating Temperature (T _{OPR})	-20°C to +70°C (see option)		
Storage Temperature (T _{STO})	-55°C to +125°C		
Frequency Stability (ΔF/ F ₀)	± 100ppm max. (see option)		
Supply Voltage (V _{DD})	5.0Vdc ± 10%		3.3Vdc ± 10%
Input Current (I _{DD})	45mA max.		25mA max.
Duty Cycle or Symmetry	45/55% max.at 1/2 VDD	45/55% max.at 1.4 VDC	45/55% max.at 1/2 VDD
Rise and Fall Times (T _R / T _F)	4ns max.		
Output Load	25 pF max.	5TTL	15 pF max.
Output Voltage (V _{OH})	0.9*V _{DD} min.	2.4V min.	0.7*V _{DD} min.
(V _{OL})	0.4V max.	0.4V max.	0.2*V _{DD} max.
Start-up Time (T _{OSC})	10 ms max.		
Tristate (OE) Function	V _{IH} : 2.0V min. Oscillation V _{IL} : 0.8V max. Hi Impedance		V _{IH} : 0.7*V _{DD} min. V _{IH} : 0.2*V _{DD} max.
Disable current (I _{DIS})	30mA max.		15mA max.
Stand - By current (Option - B)	50μA max.		20μA max.
Jitter Peak to peak	± 250ps max. for F ≤ 33MHz, ±100ps typ. ± 100ps max. for F > 33MHz, ±50ps typ.		± 250ps max. for F ≤ 33MHz, ±100ps typ. ± 125ps max. for F > 33MHz, ±75ps typ.
RMS One sigma	± 50ps max. for F ≤ 33MHz, ±30ps typ. ± 30ps max. for F > 33MHz, ±20ps typ.		± 50ps max. for F ≤ 33MHz, ±30ps typ. ± 30ps max. for F > 33MHz, ±20ps typ.
Aging	±5ppm max./Year		

* Pin 1 has internal pull-up resistor which allows Pin 1 to be left floating (enable high).

Connect a By-Pass capacitor 0.01 μF between V_{DD} and GND.

Environmental, and mechanical specifications, see appendix C. Group 1.

Reflow profile, see appendix E. Tape and Reel, see appendix H.

Marking, see appendix G. Application notes, see appendix A. Value added, see appendix D.

ORDERING OPTIONS

ACXXPX - Temperature - Overall Frequency Stability - Stand By - Value added - Packaging

O or
H

Blank
or T

-F for -30°C to +70°C
-N for -30°C to +85°C
-L for -40°C to +85°C

-J for ± 20ppm max.*
-R for ± 25ppm max.*
-K for ± 30ppm max.
-H for ± 35ppm max.
-C for ± 50ppm max.

-B

-G Gull Wing
-G2 Gull Wing
-GHT Gull Wing Reflow capable
-QXX (Trimmed Leads)

-T Tape and Reel
-TY Tray packing

* Standard temperature only. Please call us for other tighter spec.

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

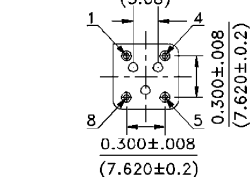
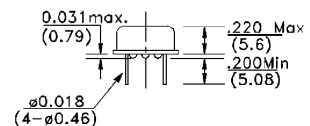
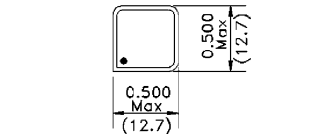
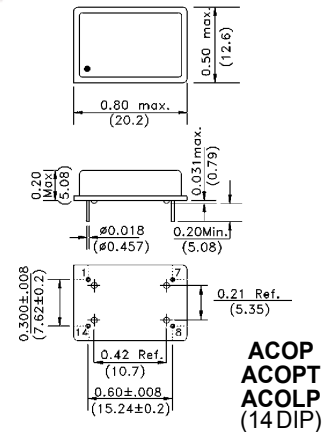
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20.2 x 12.6 x 5.08 mm



Dimensions:
Inches (mm)

PIN # ACOP ACOPT ACOLP	PIN # ACHP ACHPT ACHLP	FUNCTION
1	1	OE or PD
7	4	GND
8	5	Output
14	8	V _{DD}

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