



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# HALF SIZE DIP LOW VOLTAGE 5.0V CRYSTAL CLOCK OSCILLATOR



12.7 x 12.7 x 5.6mm

ACH Series



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

## FEATURES:

- Wide frequency range.
- HCMOS and TTL compatible.
- Tight symmetry option.
- Tri-state Enable / Disable function.

## APPLICATIONS:

- Microprocessors.
- Digital circuit.

## STANDARD SPECIFICATIONS:

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range		0.032768		200.000	MHz	
Operating Temperature		0		+70	°C	See options
Storage Temperature		-55		+125	°C	
Overall Frequency Stability		-100		+100	ppm	See options
Supply Voltage (Vdd)		4.5	5.0	5.5	V	
Input Current	32.768kHz ~ 23.999MHz			30	mA	
	24.000MHz ~ 49.999MHz			45		
	50.000MHz ~ 79.999MHz			70		
	80.000MHz ~ 200.999MHz			85		
Symmetry (@ 1/2Vdd)	32.768kHz ~ 49.999MHz	45		55	%	See options
	50.000MHz ~ 200.000MHz	40		60		
Rise and Fall Time (Tr/Tf)	32.768kHz ~ 1.999MHz			40	ns	
	2.000MHz ~ 24.000MHz			10		
	24.001MHz ~ 200.000MHz			5		
Output Load	32.768kHz ~ 79.999MHz			15	pF	See options
				10	TTL	
	80.000MHz ~ 200.000MHz			15	pF	
				5	TTL	
Output Voltage	VOH	0.9*Vdd			V	
	VOL			0.1*Vdd	V	
Tri-state Function	VIH	2.2			V	"1" or Open: Oscillation
	VIL			0.8	V	"0": Output disable (Hi Z)
Output Enable time				4	ms	For option A only
Output Disable time				100	ns	For option A only
Start-up Time			1	10	ms	

\* Overall frequency stability includes initial tolerance and temperature stability.

# HALF SIZE DIP LOW VOLTAGE 5.0V CRYSTAL CLOCK OSCILLATOR



12.7 x 12.7 x 5.6mm

ACH Series

RoHS/RoHS II Compliant

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ACH- [ ] MHz- [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

Frequency in MHz
e.g. 24.576MHz
14.31818MHz
26.000MHz

Packaging
Blank: Tube
TY: Tray

Operating Temp.
D: -10°C ~ +60°C
E: -20°C ~ +70°C
F: -30°C ~ +70°C
N: -30°C ~ +85°C
L: -40°C ~ +85°C

Freq. Stability
Y*: ± 10 ppm
J**: ± 20 ppm
R: ± 25 ppm
K: ± 30 ppm
H: ± 35 ppm
C: ± 50 ppm

Symmetry
S: 45/55% @1/2Vdd
T: 47.5/52.5% @1/2Vdd

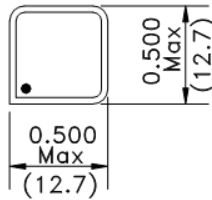
Tri-state
A: Tri-state on pin 1

Output Load
50: 50pF

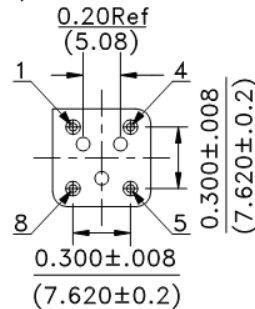
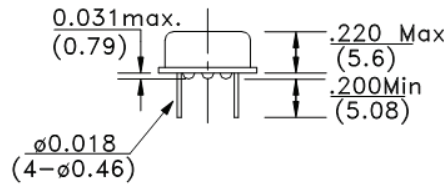
Pin form
G: Gull Wing
Q25: 0.25" (6.35)
Q20: 0.20" (5.08)
Q15: 0.15" (3.81)

Note:  
\*: Temp option D only  
\*\*: Temp option D, E and 0-70°C only

## OUTLINE DIMENSION:



Pin	Function
1	Tri-State/NC
4	Case GND
5	Output
8	Vdd



Dimensions: inches (mm)

Packaging: 40pcs /tube

**ATTENTION:** Abracon 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 is required. Please contact Abracon for more information.