## HALF SIZE DIP LOW VOLTAGE 3.3VHCMOS/TTL COMPATIBLE CRYSTAL CLOCK OSCILLATOR

**ACHL Series** 

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





### **FEATURES:**

- Tri-state Enable/Disable option
- Low supply voltage 3.3V
- HCMOS and TTL compatible
- Tight symmetry option 50% +/-5%

#### > APPLICATIONS:

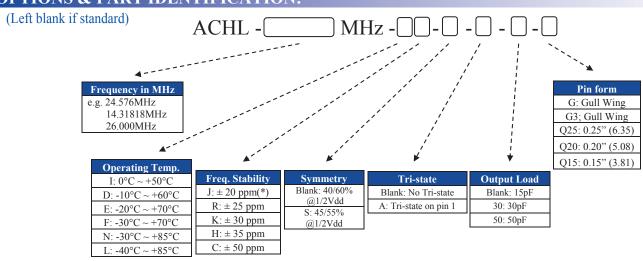
- · Clock signal sources for digital chips and microprocessors
- Low power applications

### STANDARD SPECIFICATIONS:

Parameters			Minimum	Typical	Maximum	Units	Notes
Frequency Range			0.400		160.000	MHz	
Operating Temperature			0		+70	°C	See options
Storage Temperature			-55		+125	°C	
Overall Frequency Stability			-100		+100	ppm	See options
Supply Voltage (Vdd)			2.97	3.3	3.63	V	
Input Current	0.400MHz ~ 24.999MHz				20		
	25.000MHz ~ 99.999MHz				40	mA	
	100.000MHz ~ 16000MHz				80		
Symmetry (@ 1/2Vdd)		40	50	60	%	See options	
Rise and Fall Time (Tr/Tf)	0.400MHz ~ 24.999MHz				10		
	25.000MHz ~ 99.999MHz				5	ns	
	100.000MHz ~ 16000MHz				4		
Output Load				15	pF	See options	
Output Load					5	TTL	
Output Voltage		VOH	0.9*Vdd			V	
Output voltage		VOL			0.1*Vdd	V	
Tri-state Function VIH VIL		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	
Phase Jitter RMS (12~20MHz)					1	ps	Reference only. Please contact Abracon for specific frequencies
Aging			-5.0		+5.0	ppm	@+25°C First year

<sup>\*</sup> Overall frequency stability includes initial tolerance, temperature stability, and aging.

### **OPTIONS & PART IDENTIFICATION:**



(\*) Temp option I, D, E and 0°C ~ +70°C only.





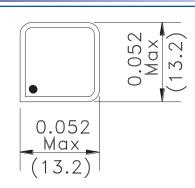
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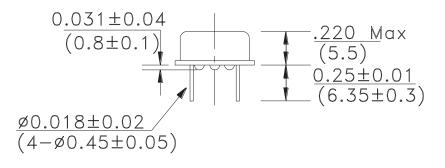
ACHL Series

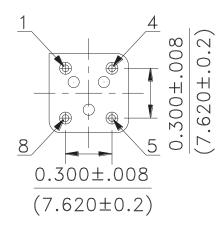




### OUTLINE DIMENSIONS:







Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

Function			
Tri-State/NC			
GND			
Output			
Vdd			

**Dimensions: inches (mm)** 

### **Packaging**

40pcs /tube

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### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### **ABRACON:**

ACHL-14.31818MHZ-EK ACHL-24.576MHZ-EK ACHL-12.000MHZ-EK ACHL-48.000MHZ-EK ACHL-48.000MHZ-ER ACHL-25.000MHZ-EK ACHL-16.000MHZ-EK ACHL-11.0592MHZ-EK ACHL-50.000MHZ-EK ACHL-8.000MHZ-EK ACHL-8.000MHZ-EK ACHL-44.736MHZ-ER ACHL-4.000MHZ-EK ACHL-27.000MHZ-EK ACHL-10.000MHZ-EK ACHL-18.432MHZ-EK ACHL-34.368MHZ-ER ACHL-32.000MHZ-EK ACHL-40.000MHZ-EK ACHL-20.000MHZ-EK ACHL-32.768MHZ-EK ACHL-3.6864MHZ-EK ACHL-83.000MHZ-C-S ACHL-66.000MHZ-C-S ACHL-128.0000MHZ-E-C-S-A ACHL-48.000MHZ-EK-G