



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# HCMOS COMPATIBLE SURFACE MOUNT LOW PROFILE (1.4max) CRYSTAL CLOCK OSCILLATOR

**ASV2 SERIES**



**RoHS  
Compliant**



7.0 x 5.0 x 1.4mm

## FEATURES:

- Low height 1.4 mm max.
- HCMOS compatible, 1.8V to 3.3VDC
- Tristate function
- Suitable for RoHS reflow
- Available for -40°C to 85°C extended temperature
- Seam sealed package assures high reliability
- Low stand-by current

## APPLICATIONS:

- Clock signaling for  $\mu$  Processors, PC Motherboards and Graphic Cards
- Wireless communications

## STANDARD SPECIFICATIONS:

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range	1.8V	0.012	-----	124.999	MHz	
	2.5V	0.012	-----	133		
	3.3V	0.012	-----	133		
Operating Temperature		-10	-----	+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	See options
Input Current	<b>Frequency</b>	<b>3.3V</b>	<b>2.5V</b>	<b>1.8V</b>	mA (max)	
	0.012MHz Fo < 0.048MHz	5	5	N/A		
	0.048MHz Fo < 1.5MHz	5	5	5		
	1.5MHz Fo < 20MHz	7	7	5		
	20MHz Fo < 50MHz	20	15	15		
	50MHz Fo < 70MHz	30	20	15		
	70MHz Fo < 125MHz	30	20	20		
125MHz Fo 133MHz	40	30	N/A			
Symmetry (@ 1/2Vdd)		40	50	60	%	See options
Rise and Fall Time (Tr/Tf)**	<b>Frequency</b>	<b>3.3V</b>	<b>2.5V</b>	<b>1.8V</b>	ns (max)	Measured between 10% and 90% of Vdd with 15pF load
	0.012MHz Fo < 1.0MHz	200	200	N/A		
	1.0MHz Fo < 20MHz	10	10	10		
	20MHz Fo < 50MHz	6	6	6		
	50MHz Fo < 70MHz	3	3	3		
	70MHz Fo < 125MHz	3	3	3		
125MHz Fo 133MHz	3	3	N/A			
Output Load				15	pF	CMOS (5TTL compatible)
Output Voltage	VOH	0.9*Vdd	-----	-----	V	
	VOL	-----	-----	0.1*Vdd	V	
Start-up Time		-----	-----	8.0	ms	
Tri-state function (Stand-by) :	Vdd	VIH	-----	VIL	V	"1" (VIH $\geq$ 0.7*Vdd) or Open: Oscillation "0" (VIH < 0.3*Vdd) : Hi Z
	1.8	1.26	-----	0.5		
	2.5	1.75	-----	0.5		
	3.3	2.0	-----	0.5		
Disable current		-----	-----	10	uA	
Absolute Period jitter (Reference only. Please contact Abracon for each frequencies.):		-----	-----	40.0	ps	
Aging		-5.0	-----	+5.0	ppm	@+25°C First year

ABRACON IS  
ISO9001:2008  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 10.29.10**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

# HCMOS COMPATIBLE SURFACE MOUNT LOW PROFILE (1.4max) CRYSTAL CLOCK OSCILLATOR



7.0 x 5.0 x 1.4mm

**ASV2 SERIES**



**RoHS  
Compliant**

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASV2  -  MHz -   -  -

P/N and Vdd (V)
ASV2: 3.3 ±10%
ASV21: 2.5 ±10%
ASV22: 1.8 ±10%

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

Packaging
Blank: Bulk
T: Tape & Reel

Output Load
Blank: 15 pF
L1: 50 pF
L2: 15 TTL
L3: 50 TTL

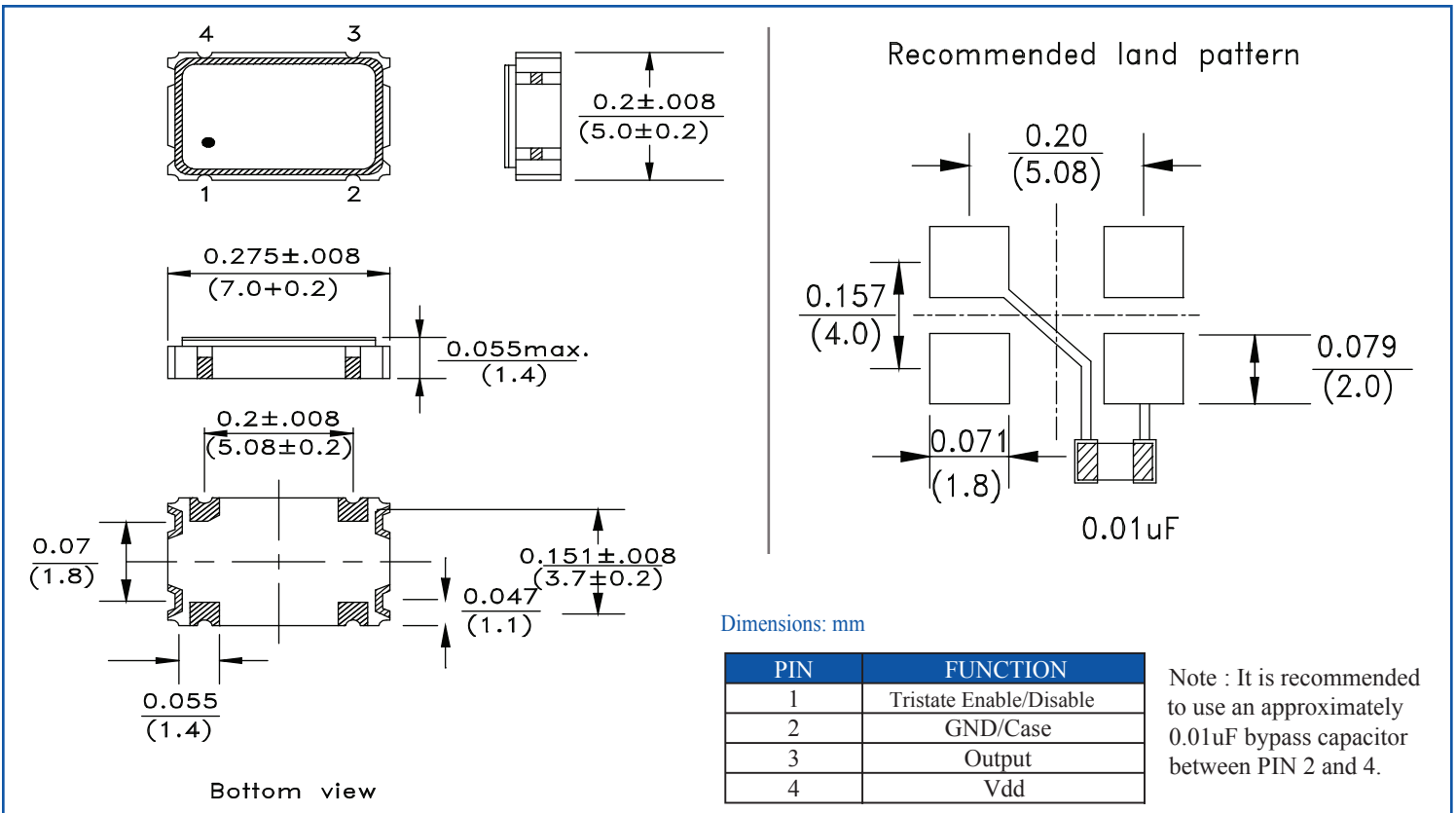
Operating Temp.
I: 0°C ~ +50°C
D: -10°C ~ +60°C
E: -20°C ~ +70°C
F: -30°C ~ +70°C
N: -30°C ~ +85°C
L: -40°C ~ +85°C

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

Symmetry
Blank: 40/60% @1/2Vdd
S: 45/55% @1/2Vdd

(\*) Temp option I, D, E, F, N and -10°C ~ +70°C only.

## OUTLINE DRAWING:



# HCMOS COMPATIBLE SURFACE MOUNT LOW PROFILE (1.4max) CRYSTAL CLOCK OSCILLATOR

ASV2 SERIES

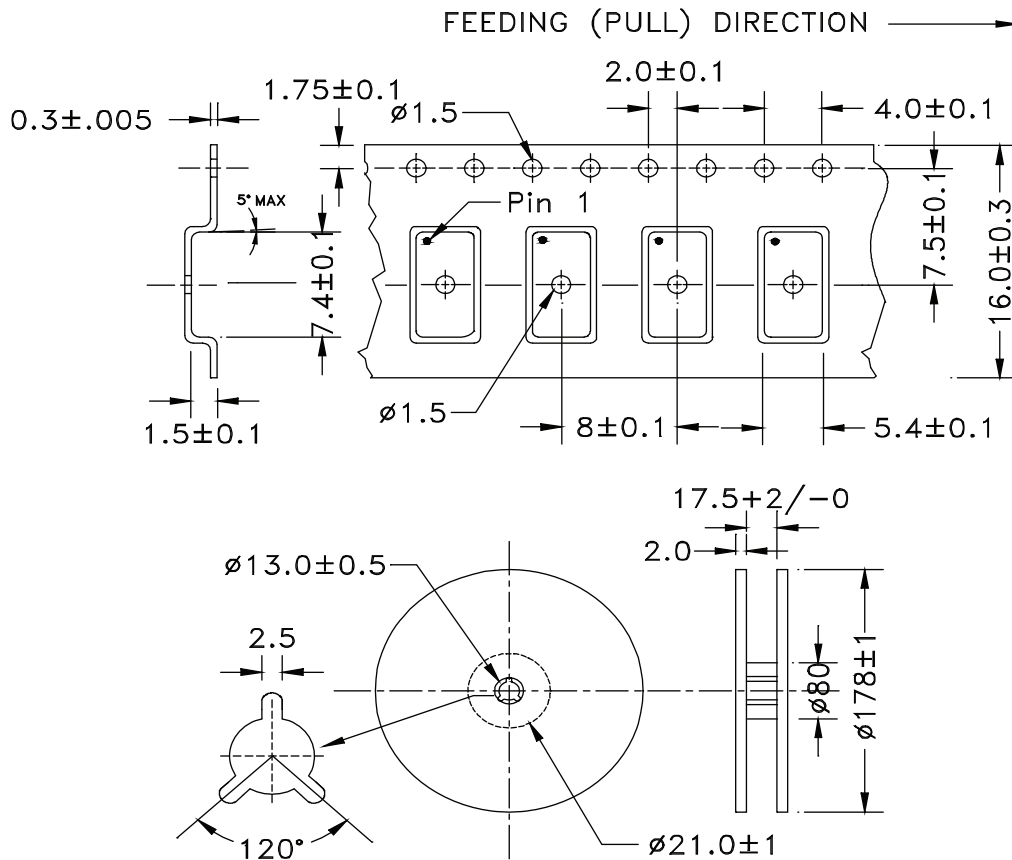


RoHS  
Compliant



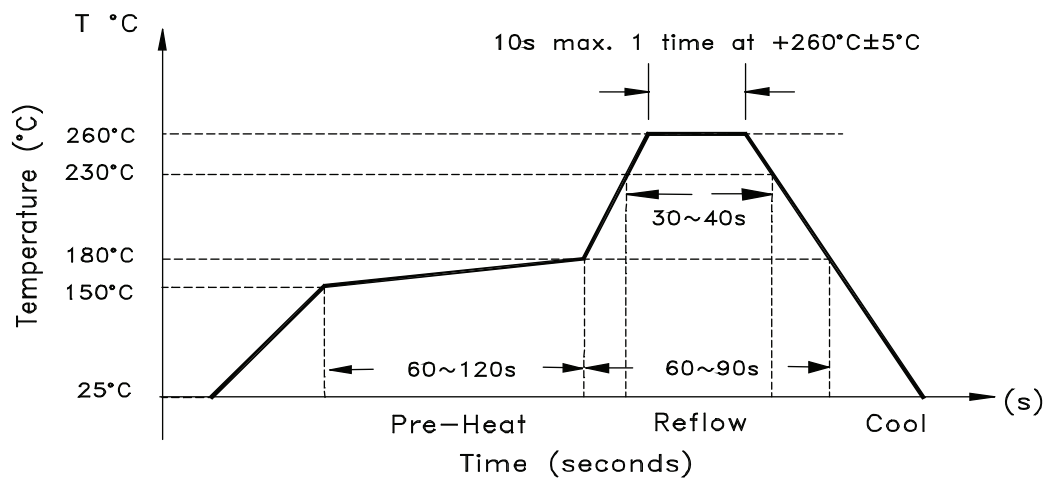
7.0 x 5.0 x 1.4mm

## TAPE & REEL: Tape and reel 1,000pcs/reel



Dimensions: mm

## REFLOW PROFILE:



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

Need a test socket for the ASV2 Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N AXS-7050-04-17

ABRACON IS  
ISO9001:2008  
CERTIFIED



Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 10.29.10**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)