

# HCMOS/TTL COMPATIBLE VOLTAGE CONTROL CRYSTAL OSCILLATOR



ASV/ASV1 SERIES

\* RoHS COMPLIANT

7.0 x 5.08 x 1.8mm

## FEATURES:

- Leadless chip carrier (LCC), Low profile.
- HCMOS/TTL Compatible, 3.3Vdc, 2.5Vdc, & 1.8Vdc operation.
- Seam welding, Reflow capable.
- Seam welding, 1.4 max. height (ASV1)

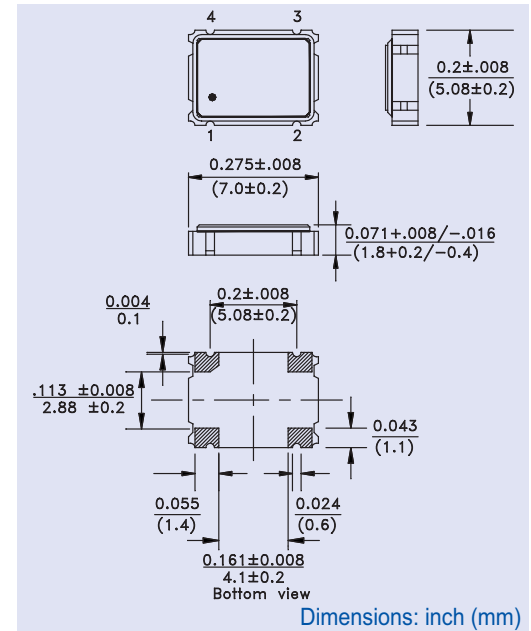
## APPLICATIONS:

- Provide clock signals for microprocessors, PC mainboards, Graphic cards.
- High output drive capability applications.

## STANDARD SPECIFICATIONS:

PARAMETERS	
Frequency Range:	1.000 MHz to 150 MHz
Operating Temperature:	-10° C to + 70° C (see options)
Storage Temperature:	- 55° C to + 125° C
Overall Frequency Stability:	± 100 ppm max. (see options)
Supply Voltage (Vdd):	3.3 Vdc ± 10% (see options)
Input Current:	See Table 1
Symmetry:	40/60 % max.@ 1/2Vdd (see options)
Rise And Fall Time (Tr/tf):	See Table 1
Output Load:	15 pF (5TTL)
Output Voltage:	VOH = 0.9 * Vdd min. VOL = 0.4 Vdc max.
Start-up Time:	10ms max.
Tristate Function :	"1" (VIH >= 2.2 Vdc) or open: Oscillation "0" (VIL < 0.8 Vdc) : Hi Z
Aging At 25°c/year :	± 5ppm max.
Period Jitter One Sigma :	± 25ps max.
Disable Current:	15µA max.

## OUTLINE DRAWING:



## MARKING:

- XX.X RS (see note)
- ASV ZYW (see note)

### Alternate Marking:

Marking scheme subject to change without notice.  
Contact factory for Alternate Marking Specifications.

## NOTE:

XX.X First 3 digits of freq.  
ex: 66.6 or 100  
R Freq. Stability option (\*)  
S Duty cycle option (\*)  
L Temperature option (\*)  
Z month A to L  
Y year 6 for 2006  
W traceability code (A to Z)

PIN	FUNCTION
1	Tri-state
2	GND/Case
3	Output
4	Vdd

Table 1

Freq. (MHz)	I <sub>dd</sub> max. (mA)	Tr/Tf max. (nSec)
1.0 ~ 34.99	16	10ns
35.0 ~ 60.0	25	5ns
60.01~99.99	40	5ns
100 ~ 150	50	2.5ns

## OPTIONS AND PART IDENTIFICATION (Left blank if standard):

ASV - Voltage - Frequency - Temp. - Overall Frequency Stability - Duty cycle - Packaging

### Freq Stability options:

- Y for ± 10 ppm max.
- J for ± 20 ppm max.
- R for ± 25 ppm max.
- K for ± 30 ppm max.
- H for ± 35 ppm max.
- C for ± 50 ppm max.

### Temperature options:

- I for 0°C to +50°C
- 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

### Voltage options:

- 25 for 2.5V
- 18 for 1.8V

### Packaging option:

- T for Tape and Reel (1,000pcs/reel)
- T5 for Tape and Reel (500pcs/reel)

### Symmetry option:

- S for 45/55% at 1/2Vdd
- S1 for 45/55% at 1.4Vdc

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED

rev(2)-1-5.06



30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com