# 3.3Vdc HCMOS/SMD CRYSTAL CLOCK OSCILLATOR



# ASV SERIES

#### **FEATURES**:

- HCMOS/Compatible, 3.3Vdc, 2.5Vdc, & 1.8Vdc options
- Suitable for RoHS reflow
- Seam sealed package assures high reliability
- High output drive capability (up to 50pF)

### STANDARD SPECIFICATIONS:

#### PARAMETERS

PARAIVIETERS				
ABRACON P/N	ASV Series			
Frequency Range	0.312MHz to 165 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 time / Fall time (Tr/Tf)	See Table 1			
Output Load	15pF (10TTL) (see options)			
Output Voltage	VOH = 0.9 * Vdd min.; VOL = 0.4 Vdc max.			
Start-up Time	See Table 1			
Tristate Function (see Tri-state option)	"1" (VIH >= 0.7*Vdd) or open: Oscillation "0" (VIL < 0.3*Vdd) : Hi Z			
Disable Current (with Power Down)	10µA max.			
Disable Current (without Power Down)	200µA (Option A)			
Enable Time (with Power Down)	3.5ms Typ, 5ms max.			
Enable Time (without Power Down)	100ns (Option A)			
Disable Time (with Power Down)	100ns max.			
Disable Time (without Power Down)	100ns max. (Option A)			
Aging at 25°C (firstyear) :	± 5ppm max.			
Period Jitter one sigma	See Table 1			

#### Table 1 (Typical value is for only reference.)

Clock signaling for µProcessors, PC Motherboards

RoHS

Compliant

Pb

> APPLICATIONS:

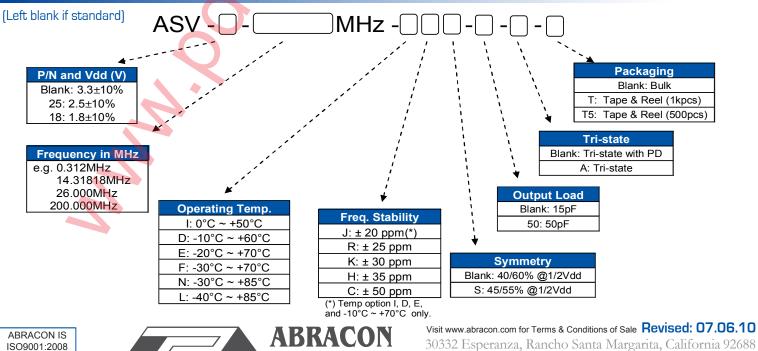
& Graphic Cards

Frequency (MHz)	ldd (Typ) (mA)	ldd (Max) (mA)	Tr/Tf (Typ) (ns)	Tr/Tf (max) (ns)	Start-up time (Typ) (ms)	Start-up time (Max) ms	Period Jitter RMS (Typical) ps
0.5~14.9	2.0	10.0	3.0	5.0	0.4	4.0	2.5
15.0~29.9	3.6	15.0	2.8	4.0	0.4	4.0	3.2
30.0~39.9	5.6	20.0	2.6	4.0	2.0	4.0	3.2
40.0~49.9	7.2	25.0	2.4	4.0	1.5	4.0	3.2
50.0~59.9	13.3	30.0	2.2	4.0	2.9	5.0	3.2
60.0~79.9	19.0	35.0	2.2	4.0	1.5	5.0	3.2
80.0~99.9	20.2	45.0	2.0	4.0	1.3	5.0	3.0
100.0~125.0	23.7	50.0	1.8	4.0	1.8	5.0	2.9
125.1~165.0	27.2	65.0	1.5	4.0	2.7	5.0	2.9

<sup>\*</sup> Contact Abracon for higher frequencies

## OPTIONS & PART IDENTIFICATION:

CERTIFIED



ORPORATION

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

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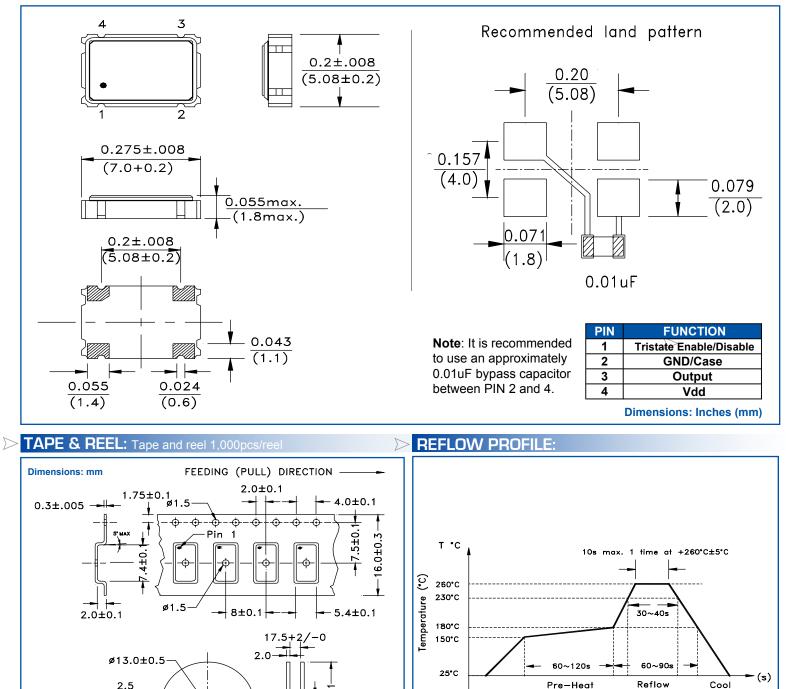
RoHS

Compliant

Pb

ASV SERIES

### **OUTLINE DRAWING:**





120

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Time (seconds)