

# LOW VOLTAGE HCMOS SURFACE-MOUNT CRYSTAL CLOCK OSCILLATOR



2.5 X 2.0 X 0.8mm

ASD SERIES



RoHS Compliant

## FEATURES:

- Lead-Free
- Compact and low in height
- Low current consumption
- Tri state function
- Suitable for high density SMT
- IR reflow capable
- Tight stability option
- Seam sealed package

## APPLICATIONS:

- CCD clock for VTR Camera
- Equipment connected to PC or PC cards
- Thin equipment

## STANDARD SPECIFICATIONS:

PARAMETERS	
ABRACON P/N	ASD Series
Frequency Range	1.000 MHz to 80 MHz
Operating Temperature	-10°C to + 60°C (see options)
Storage Temperature	- 40°C to + 85°C
Overall Frequency Stability	± 100 ppm max. (see options)
Supply Voltage (Vdd)	3.3 ± 0.3 (see table 1)
Input Current	See Table 2 for example typical value (depending on F & Vdd)
Symmetry	40/60 % max.@ 1/2Vdd (see options)
Rise and Fall Time (Tr/Tf)	See Table 3
Output Load	15 pF (3TTL), (1TTL for 1.8V version)
Output Voltage	VOH = 0.9* Vdd min. VOL = 0.1* Vdd max.
Start-up Time	10ms max.
Tristate Function (stand-by)	"1" (VIH >= 0.7* Vdd) or open: Oscillation "0" (VIL < 0.3* Vdd) : No oscillation/Hi Z
Peak to Peak Jitter	31ps (Typical)
RMS Jitter	4.3ps (Typical)
Aging at 25°C/year	± 5ppm max.
Disabled Current	15µA max.

TABLE 1

P/N	Vdd (V)
ASD	3.3±0.3
ASD1	3.0±0.3
ASD2	2.7±0.2
ASD3	1.8±0.18

TABLE 2 - Example Value

F	I @ Vdd typ.
20MHz	5mA@3.0V
50MHz	8mA@3.0V

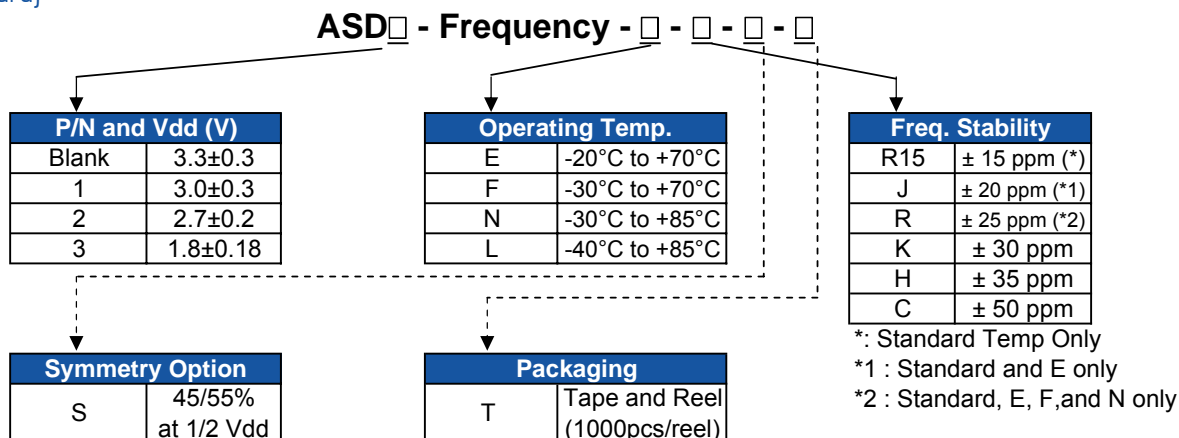
(depending on F and Vdd)

TABLE 3

Freq. (MHz)	Tr/Tf (ns max)
1.0 ~ 34.99	10ns
35.0 ~ 80.0	6ns

## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)



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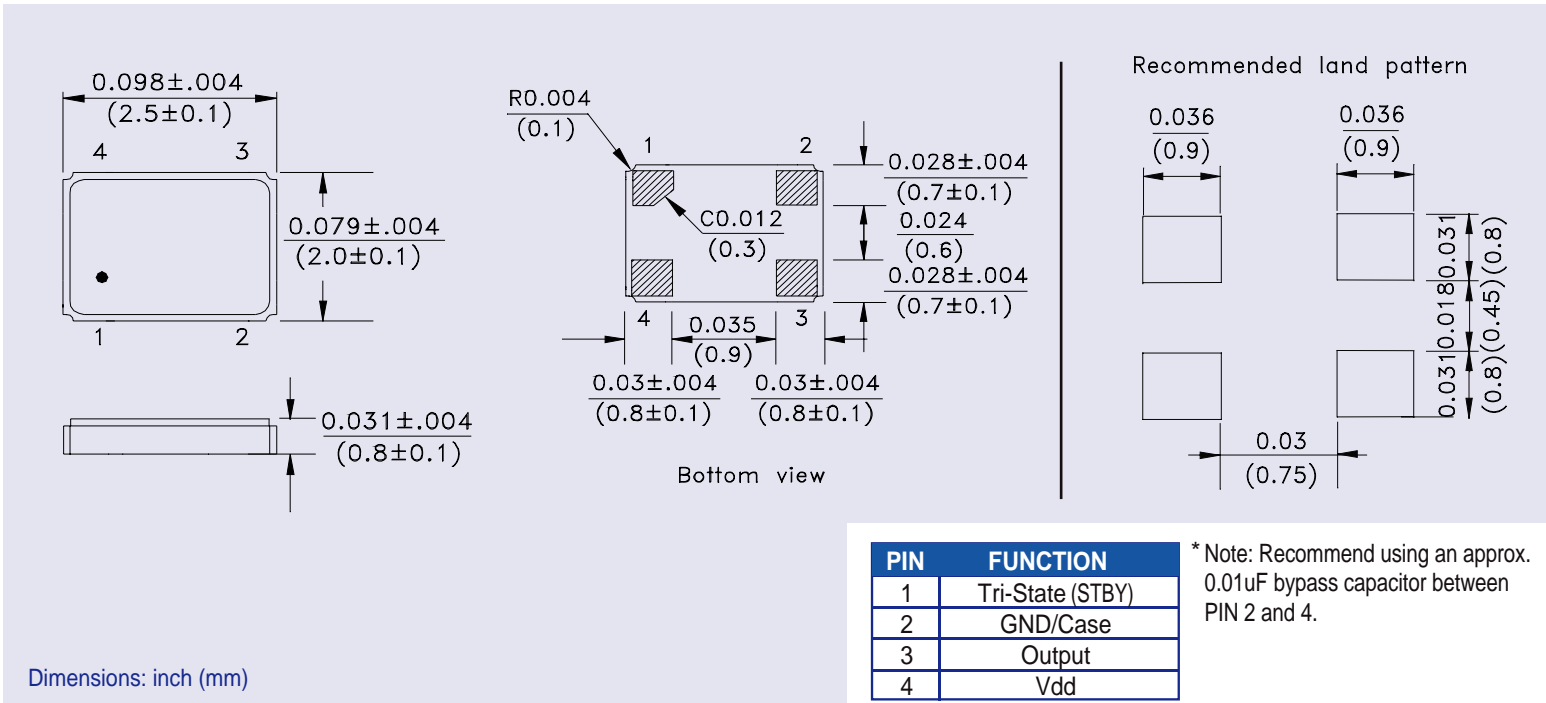


2.5 X 2.0 X 0.8mm

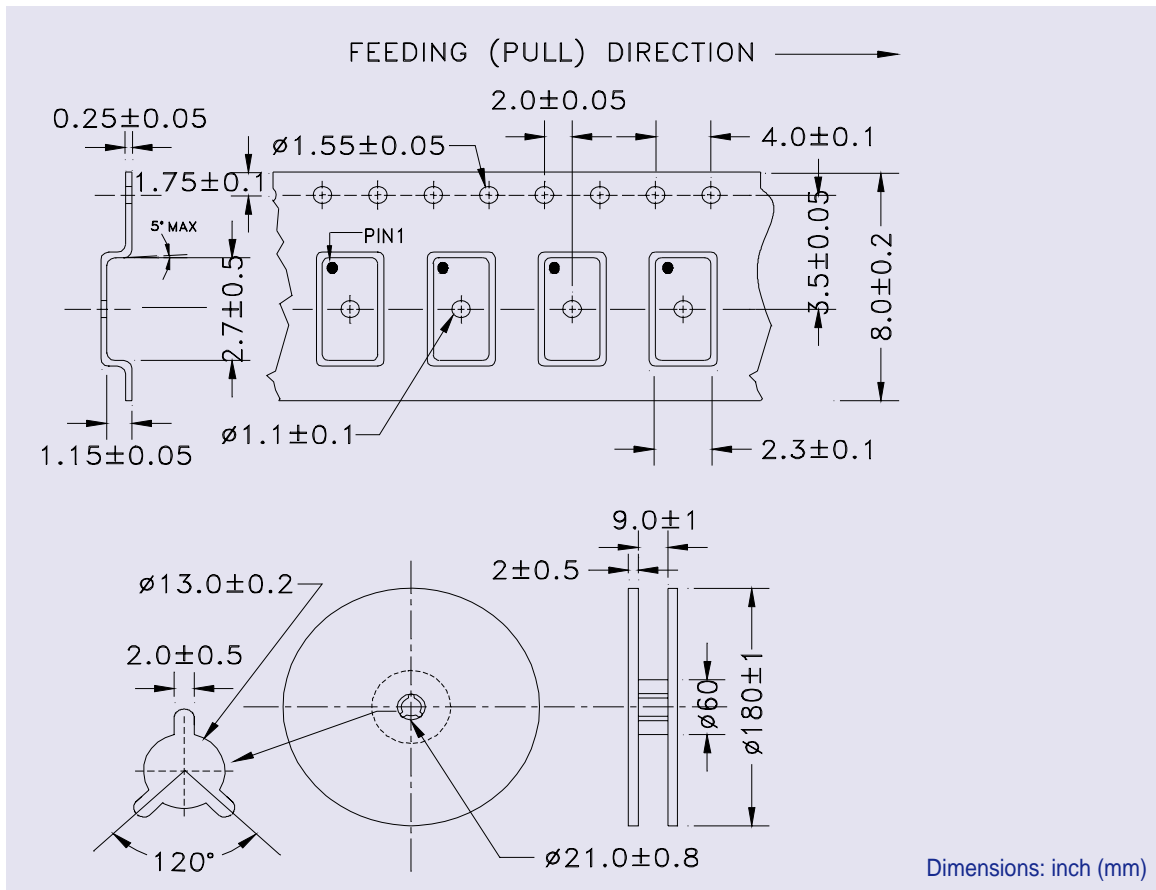
ASD SERIES



## OUTLINE DRAWING:



## TAPE & REEL:



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



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