

5.0V HCMOS/TTL COMPATIBLE SMD CRYSTAL CLOCK OSCILLATOR

ASL1 Series



RoHS
Compliant



7.0 x 5.08 x 1.4mm

FEATURES:

- HCMOS and TTL compatible.
- Available optional -40°C to 85°C extended temperature.
- Tri-state Enable/Disable function.
- IR reflow capable
- Seam sealed.

APPLICATIONS:

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

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N:	ASL1 Series
Frequency range:	1.000 ~ 125.000 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):	5.0 V ± 10%
Input current:	See Table 1
Symmetry at 1/2Vdd:	40/60 % max. (see options)
Rise and fall time (Tr/Tf):	See Table 1
Output load:	10TTL or 50 pF (1MHz to 70MHz) 10TTL or 15 pF (70.001MHz to 125MHz)
Output voltage:	VOH = 0.9 * Vdd min. VOL = 0.4 * Vdc max.
Start-up time:	10 ms max.
Tri-state function:	"1" (VIH ≥ 2.2 V) or open: Oscillation "0" (VIL < 0.8 V) : Hi Z
Aging at 25°C/year:	±5ppm max.
Period jitter one sigma:	± 25ps max
Period jitter absolute:	± 100ps max.

Table 1

Freq. (MHz)	Idd max. (mA)	Tr/Tf max. (nSec)
1.0 ~ 34.99	25	10
35.0 ~ 60.0	40	5
60.01~100.0	60	5
100.01 ~ 125	80	2.5

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASL1 - Frequency - □ - □ - □ - □ - □

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

Overall Frequency	
J*	±20ppm
R	±25ppm
K	±30ppm
H	±35ppm
C	±50ppm

*Temp. option I, D, E, and -10°C to +70°C only

Packaging	
Blank	Bulk
T	Tape and Reel

Output Load	
50	50pF

Symmetry	
S	45/55% @ 1/2Vdd
S1	45/55% @ 1/4Vdd





7.0 x 5.08 x 1.4mm

Technical drawing of a rectangular plate with dimensions and tolerances:

- Top View:** A rectangle with a central hole. Dimensions are 140 mm (width, labeled 1) and 208 mm (height, labeled 2).
- Side View:** A cross-section showing a thickness of 0.275 ± 0.008 mm (7.0 ± 0.2 mils).
- Bottom View:** A rectangle with four corner slots. Dimensions are 140 mm (width, labeled 1) and 208 mm (height, labeled 2).
- Corner Slot Dimensions:** The width of the corner slots is 0.055 mm (1.4 mils) and the height is 0.024 mm (0.6 mils).
- Central Hole Dimensions:** The diameter of the central hole is 0.2 ± 0.008 mm (5.08 ± 0.2 mils).
- Slot Dimensions:** The width of the slots is 0.055 ± 0.008 / -0.016 mm (1.4 ± 0.2 / -0.4 mils).
- Slot Depth:** The depth of the slots is 0.043 mm (1.1 mils).

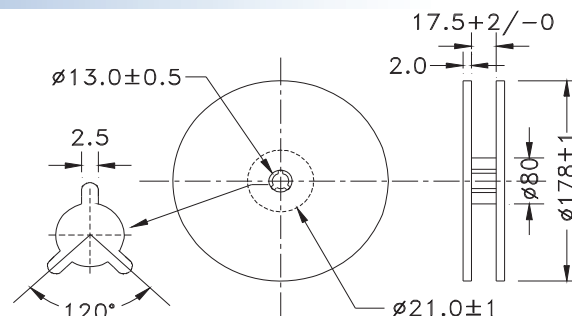
Bottom view

Dimensions: inches (mm)

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

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

Technical drawing of a multi-pin connector assembly. The drawing shows a side view of a connector with four pins. Key dimensions include: overall width 16.0 ± 0.3 , pin pitch 2.0 ± 0.1 , pin diameter $\varnothing 1.5$, and a 5°MAX angle on the side profile. A "FEEDING (PULL) DIRECTION" arrow points to the right. Labels include "Pin 1" and $\varnothing 1.5$.



Dimensions: mm

NOTE: Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.