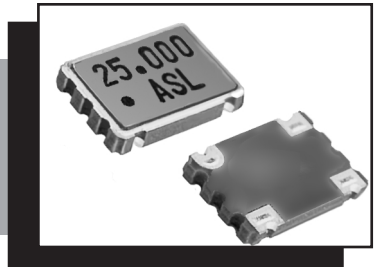


# HCMOS/TTL COMPATIBLE CERAMIC SURFACE MOUNT CRYSTAL CLOCK OSCILLATORS ASL



## FEATURES:

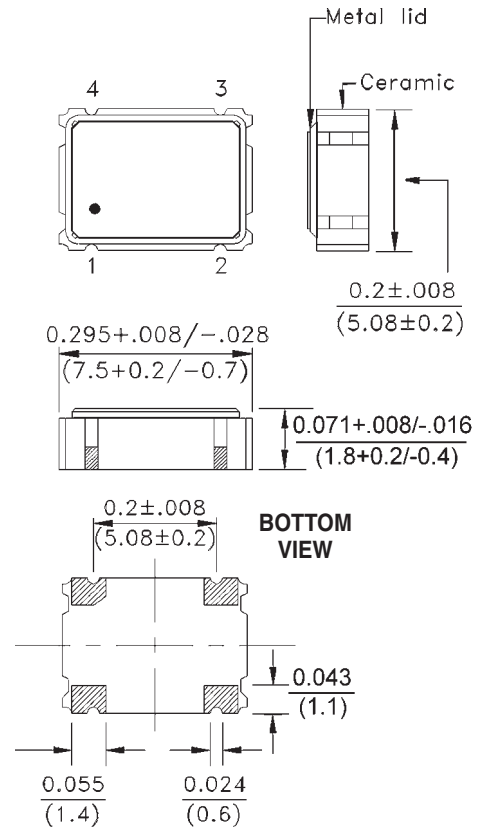
- Leadless chip carrier (LCC), low profile.
- HCMOS and TTL Compatible.
- Tristate Enable/Disable Function.
- High Density Surface-Mount Applications.
- Available optional -40°C to 85°C extended temperature.
- Packaging: Tape and Reel.

## APPLICATIONS:

- Provide clock signals for microprocessors and digital circuits.
- High Output drive capability applications.

## STANDARD SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Frequency Range (F <sub>0</sub> )	1.544 MHz - 125 MHz
Operating Temperature (T <sub>OPR</sub> )	-10°C to +70°C (See Options)
Storage Temperature (T <sub>STO</sub> )	-55°C to +125°C
Frequency Stability (ΔF/F <sub>0</sub> )	± 100 ppm max. (See Options)
Supply Voltage (V <sub>dd</sub> )	5 Vdc ± 10%
Input Current (I <sub>dd</sub> )	30 mA max. for F ≤ 32 MHz 45 mA max. for F ≤ 50 MHz 50 mA max. for F ≤ 125 MHz
Duty Cycle or Symmetry	40 / 60% max. @ 1/2 V <sub>dd</sub> (See Options)
Rise and Fall Times (T <sub>R</sub> / T <sub>F</sub> )	6 ns max. for F < 100 MHz 4 ns max. for F ≥ 100 MHz
Output Load	10TTL or 15 pF (50pF max.) for F ≤ 50 MHz 5TTL (25 pF) for F ≤ 100 MHz 5TTL (15 pF) for F ≤ 125 MHz
Output Voltage	0.9 * V <sub>dd</sub> min. (V <sub>OH</sub> )      0.4 V <sub>dc</sub> max. (V <sub>OL</sub> )
Start-up Time (T <sub>osc</sub> )	10 ms max.
Tristate Function (V <sub>IH</sub> )	"1" or Open: Oscillation ≥ 2.2V
(V <sub>IL</sub> )	"0": Output disabled in high impedance (Hi Z) < 0.8V



Dimensions: Inches (mm)

(\*) Pin 1 has internal pull-up resistor which allows Pin 1 to be left floating (enable high)  
For test circuit, waveforms, please see page 67.

Environmental and mechanical specifications on page 68, Group 2. Marking, see p. 78.

A bypass capacitor 0.01 μF is required from V<sub>dd</sub> to Gnd. See page 60.

Tape and Reel, (1,000 pcs./reel) see pages 74-75.

## ORDERING OPTIONS

ASL - Frequency - Temperature - Overall Freq. Stability - Duty Cycle - 50 - Packaging

XX.XXXXX MHz

-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

-S for 45/55% @ 1/2 V<sub>dd</sub>  
-S1 for 45/55% @ 1.4 V<sub>dc</sub>

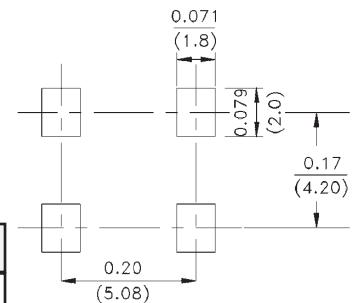
-R for ± 25 ppm max  
-K for ± 30 ppm max  
-H for ± 35 ppm max  
-C for ± 50 ppm max

50 pF load  
output drive

-T  
(Tape & Reel)

PIN NO.	FUNCTION
1	Tristate E/D
2	GND / Case
3	Output
4	V <sub>dd</sub>

## RECOMMENDED LAND PATTERN



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED

NOTE: Left blank if standard • All specifications and markings subject to change without notice

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