

## 3.3 Vdc • HCMOS/TTL COMPATIBLE CERAMIC SURFACE MOUNT CRYSTAL CLOCK OSCILLATORS

# ASV

### FEATURES:

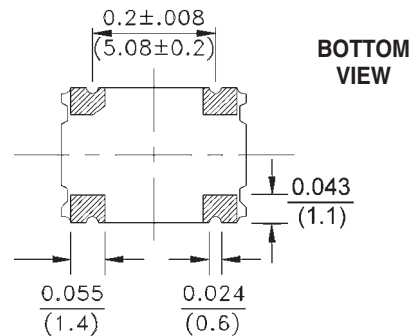
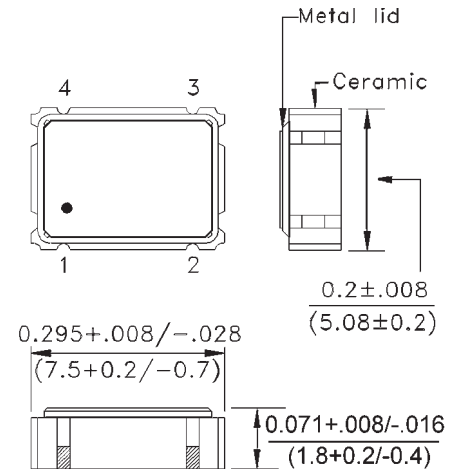
- Leadless chip carrier (LCC), low profile.
- Tight Symmetry Option.
- Tristate Enable / Disable Function.
- HCMOS and TTL Compatible, 3.3 Vdc operation.
- Available optional -40°C to 85°C extended temperature.
- Packaging: Tapes and Reel, or bulk.

### APPLICATIONS:

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

## STANDARD SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Frequency Range (F <sub>0</sub> )	<b>1.544 MHz - 100 MHz</b>
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> )	3.3 Vdc ± 10%
Input Current (I <sub>dd</sub> )	25 mA max. 10 mA typ. for F < 20 MHz 20 mA typ. for F < 50 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.
Output Load	5TTL or 15 pF
Output Voltage (V <sub>OH</sub> ) (V <sub>OL</sub> )	0.9 * V <sub>dd</sub> min. 0.4 Vdc max.
Start-up Time (T <sub>Osc</sub> )	10 ms max.
Tristate Function (V <sub>IH</sub> ) (V <sub>IL</sub> )	"1" or Open: Oscillation ≥ 2.2V "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 1.

Marking, see page 78. Tape and Reel, see pages 74-75 (1,000 pcs./reel).

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

## ORDERING OPTIONS

ASV - Frequency - Temperature - Overall Frequency Stability - Duty Cycle - Packaging

XX.XXXXX MHz

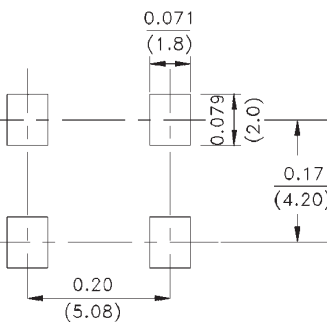
-D for -10°C to +60°C  
-E for -20°C to +70°C  
-F for -30°C to +70°C  
-N for -30°C to +85°C  
-L for -40°C to +85°C

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

-T  
(Tape & Reel)

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

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



RECOMMENDED  
LAND PATTERN

ABRACON



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

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