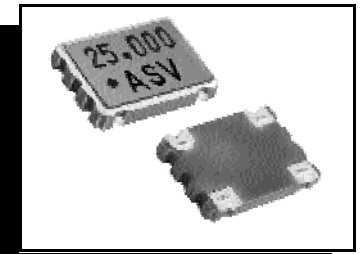


3.3 Vdc • HCMOS/ TTL COMPATIBLE CERAMIC SURFACE MOUNT

CRYSTAL CLOCK OSCILLATORS

ASV and ASV1



7.0 x 5.08 x 1.8 mm

FEATURES:

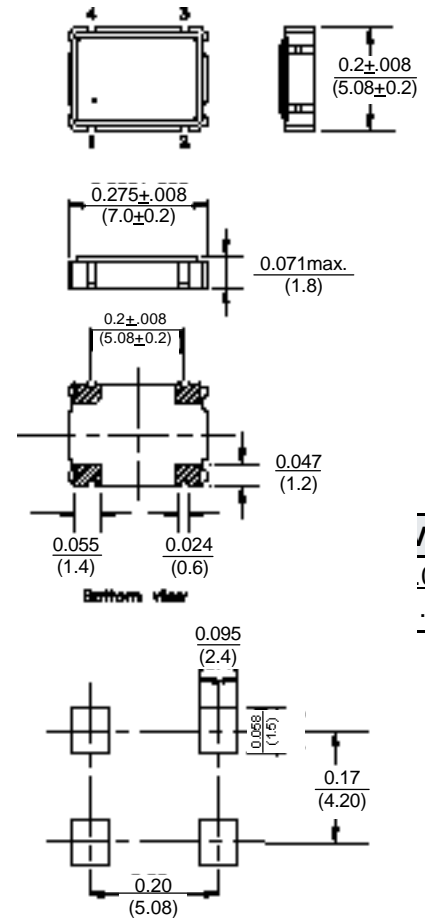
- Leadless chip carrier (LCC), Low profile.
- Seam welding, 1.4 max. height (ASV1)
- Tristate Enable / Disable function.
- HCMOS and TTL Compatible, 3.3Vdc operation.
- Available optional -40°C to 85°C extended temperature.
- Packaging: Tape and Reel.
- Seam welding, Reflow capable.

APPLICATIONS:

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

STANDARD SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Frequency Range (F ₀)	1.00MHz - 150MHz
Operating Temperature (T _{OPR})	-10°C to +70°C (See Options)
Storage Temperature (T _{STO})	-55°C to +125°C
Frequency Stability (ΔF/F ₀)	±100ppm max. (See Options)
Supply Voltage (V _{DD})	3.3Vdc ±10%
Input Current (I _{DD})	10mA max. for F < 15MHz 16mA max. for F < 35MHz 25mA max. for F ≤ 60MHz 40mA max. for F < 100MHz 50mA max. for F ≤ 150MHz
Duty Cycle or Symmetry	40/60% max. @ 1/2V _{DD} (See Options)
Rise and Fall Times (T _R / T _F)	10ns max. for F < 35MHz / 5ns max for F < 100MHz 2.5ns max for F ≤ 150MHz
Output Load	5TTL or 15pF
Output Voltage (V _{OH})	0.9* V _{DD} min.
(V _{OL})	0.4Vdc max.
Start-up Time (T _{OSC})	10ms max.
Tristate Function (V _{IH})	"1" or Open: Oscillation > 2.2V
(V _{IL})	"0": Output disabled in high impedance (HiZ) < 0.8V
Aging @ 25°C	±5ppm Max. per year
Period jitter one sigma	±25ps Max.



/1
.055
.40

Recommended lead pattern

Dimensions: Inches (mm)

* Pin 1 has internal pull-up resistor which allows Pin 1 to be left floating (enable high)
Test circuit, waveform, please see appendix B.

Environmental and mechanical specifications, see appendix C. Group 1.

Marking, see appendix G. Tape and Reel, see appendix H.(1,000 pcs./reel).

A bypass capacitor 0.01 μF is required from V_{DD} to Gnd. Application notes, see appendix A.

ORDERING OPTIONS

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

Blank
or 1

XXX.XXXXX MHz

-I for -0°C to +50°C
-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

-Y for ± 10ppm max.*
-J for ± 20ppm max.*
-R for ± 25ppm max.
-K for ± 30ppm max.
-H for ± 35ppm max.
-C for ± 50ppm max.

-T
(Tape & Reel)

-S for 45/55% @ 1/2V_{DD}
-S1 for 45/55% @ 1.4V_{DD}

* Please contact us for availability

PIN NO.	FUNCTION
1	Tristate E/D
2	GND / Case
3	Output
4	V _{DD}

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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