



ASML"供应商

14.0 x 8.95 x 4.7 mm

3.3 Vdc • HCMOS/TTL • J-LEADED • PLASTIC MOLDED • SURFACE MOUNT

CRYSTAL CLOCK OSCILLATORS

ASML

## FEATURES:

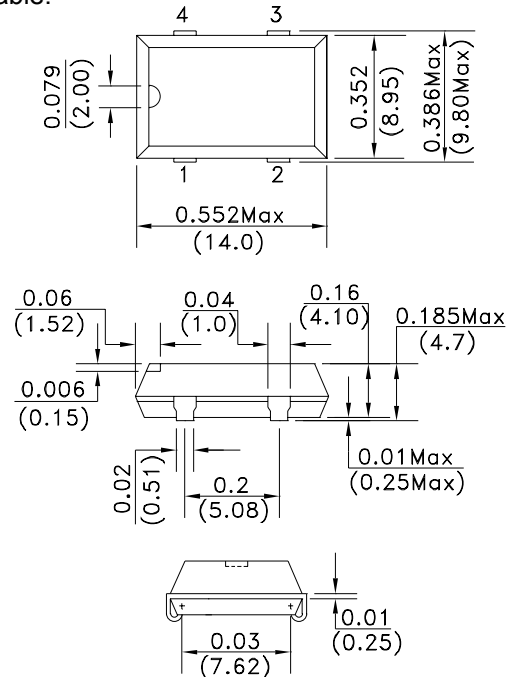
- Industry standard J-Leaded terminals.
- Low current consumption.
- HCMOS output.
- Extended temperature -40°C to +85°C option.
- Plastic molded SMD, Reflow capable.
- Tristate Enable/Disable.
- 3.3Vdc operation.

## APPLICATIONS:

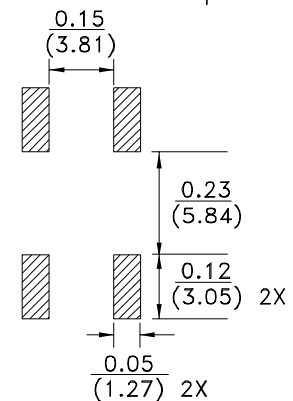
- Provide clock signals for microprocessors and digital circuits.
- Communication equipment, AV and OA equipment

## STANDARD SPECIFICATIONS

| PARAMETERS                             | SPECIFICATIONS                                                                               |
|----------------------------------------|----------------------------------------------------------------------------------------------|
| Frequency Range ( $F_0$ )              | 1MHz - 160MHz                                                                                |
| Operating Temperature ( $T_{OPR}$ )    | 0°C to +70°C (See Options)                                                                   |
| Storage Temperature ( $T_{STO}$ )      | -40°C to +85°C                                                                               |
| Frequency Stability ( $\Delta F/F_0$ ) | ±100ppm max. (See Options)                                                                   |
| Supply Voltage ( $V_{dd}$ )            | 3.3Vdc ±10%                                                                                  |
| Input Current ( $I_{dd}$ )             | 10mA max. ( $F \leq 20$ MHz) ; 25mA max. ( $F \leq 70$ MHz)<br>60mA max. ( $F \leq 160$ MHz) |
| Duty Cycle or Symmetry                 | 40 / 60% max. (See Options)                                                                  |
| Rise and Fall Times ( $T_R / T_F$ )    | 6ns max.                                                                                     |
| Output Load                            | 2TTL, 15pF max.                                                                              |
| Output Voltage ( $V_{OH}$ )            | 0.9 *Vdd min.                                                                                |
| ( $V_{OL}$ )                           | 0.4Vdc max.                                                                                  |
| Start-up Time ( $T_{OSC}$ )            | 10ms max.                                                                                    |
| Tristate Function ( $V_{IH}$ )         | "1" or Open: Oscillation $\geq 2.2V$                                                         |
| ( $V_{IL}$ )                           | "0": (HiZ) $< 0.6V$<br>Output disabled in high impedance                                     |
| Aging                                  | ±5ppm/ Year max.                                                                             |



Recommended land pattern



Dimensions: Inches (mm)

| PIN NO. | FUNCTION        |
|---------|-----------------|
| 1       | Tristate Enable |
| 2       | GND / Case      |
| 3       | Output          |
| 4       | Vdd             |

\* 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 2.

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

A bypass capacitor 0.01  $\mu$ F is required from Vdd to Gnd.

Application notes, see appendix A. Reflow profile, see appendix E.

## ORDERING OPTIONS

ASML - Frequency - Temperature - 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

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

-S for 45/55% @ 1/2Vdd

-T  
(Tape & Reel)



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

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