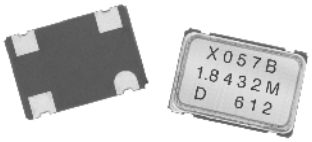
# Surface Mount Oscillator




The XOSM-573 series is an ultra miniature package clock oscillator with dimensions 7.0 x 5.0 x 1.6 mm. It is mainly used in portable PC and telecommunication devices and equipment.

## FEATURES

- Miniature Package
- Tri-state enable/disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 3.3 V input voltage
- 100 % Lead (Pb)-free and RoHS compliant

Pb-free

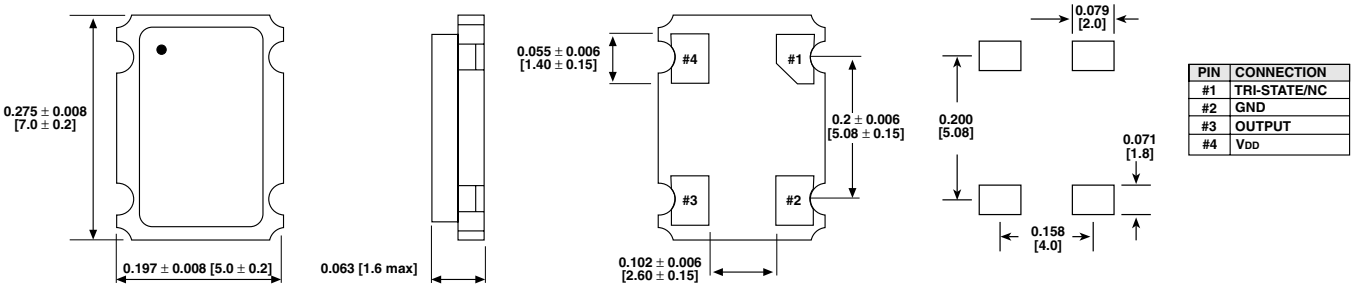
**RoHS** COMPLIANT

## STANDARD ELECTRICAL SPECIFICATIONS

| PARAMETER | | SYMBOL | CONDITION | XOSM-573 |
|---|---|---|---|---|
| Frequency Range | | $F_O$ | | 1 MHz ~ 100.000 MHz |
| Frequency Stability* | | | All Condition* | ± 25 ppm, ± 50 ppm, ± 100 ppm |
| Operating Temperature Range | | $T_{OPR}$ | | 0 °C ~ 70 °C (- 40 °C ~ + 85 °C option) |
| Storage Temperature Range | | $T_{STG}$ | | - 55 °C ~ + 125 °C |
| Power Supply Voltage | | $V_{DD}$ | | 3.3 V ± 10 % |
| Aging (First Year) | | | 25 °C ± 3 °C | ± 5 ppm |
| Supply Current | | $I_{DD}$ | 1.000 MHz to 23.999 MHz | 20 mA Max |
| | | | 24.000 MHz to 49.999 MHz | 30 mA Max |
| | | | 50.000 MHz to 69.999 MHz | 40 mA Max |
| | | | 70.000 MHz to 100.000 MHz | 60 mA Max |
| Output Symmetry | | Sym | At $^1/_2$ $V_{DD}$ | 40/60 % (45/55 % Option) |
| Rise Time | | $T_r$ | 10 % $V_{DD}$ ~ 90 % $V_{DD}$ | 5 ns Max |
| Fall Time | | $T_f$ | 90 % $V_{DD}$ ~ 10 % $V_{DD}$ | 5 ns Max |
| Output Voltage | | $V_{OH}$ | | 90 % $V_{DD}$ Min |
| | | $V_{OL}$ | | 10 % $V_{DD}$ Max |
| Output Load | HCMOS Load | | | 30 pF Max |
| Start-up Time | | | Ts | 10 ms Max |
| Pin 1, tri-state function | | | | Pin 1 = H or open.... output active at pin 3<br>Pin 1 = L..... high impedance at pin 3 |

* Include: 25 °C tolerance, operating tempe2ure range, input voltage change, aging, load change, shock and vibration.

## DIMENSIONS in inches [millimeters]




| PIN | CONNECTION |
|---|---|
| #1 | TRI-STATE/NC |
| #2 | GND |
| #3 | OUTPUT |
| #4 | $V_{DD}$ |

***note: A 0.01 µF bypass capacitor should be placed between VDD(Pin4) and GND(Pin2) to minimize power supply line noise

## ORDERING INFORMATION

| XOSM-573 | B | R | E | 50 M | e4 |
|---|---|---|---|---|---|
| MODEL | FREQUENCY STABILITY | OTR | ENABLE/DISABLE | FREQUENCY/MHz | JEDEC LEAD (Pb)-FREE STANDARD |
| | AA = 0.0025 % (25 ppm)<br>A = 0.005 % (50 ppm)<br>B = 0.01 % (100 ppm)<br>Standard | Blank = Standard<br>R = - 40 °C to + 85 °C | E = Disable to Tristate | | |

## GLOBAL PART NUMBER

| X | O | 3 | 7 | C | T | E | C | N | A | 5 | 0 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | | | | FREQUENCY STABILITY | OTR | ENABLE/ DISABLE | PACKAGE CODE | OPTIONS | | FREQUENCY | | |



For technical questions contact: frequency@vishay.com

## GLOBAL PART NUMBERING

| X O 5 2 | C | T | E | L | N A | 4 0 M |
|---|---|---|---|---|---|---|
| **MODEL NUMBER** | **FREQUENCY STABILITY** | **OPERATING TEMPERATURE (OTR)** | **ENABLE/ DISABLE** | **PACKAGE CODE** | **OPTIONS** | **FREQUENCY** |
| XO53 = XO-53<br>XO54 = XO-54<br>XO34 = XO-543<br>XO52 = XO-52<br>XO53 = XO-523<br>XO56 = XO-56<br>XOVC = XOVC-23<br>XO5M = XOSM-52<br>XO63 = XOSM-533<br>XO62 = XOSM-532<br>XO61 = XOSM-531<br>XO57 = XOSM-57<br>XO37 = XOSM-573<br>XO27 = XOSM-572<br>XO17 = XOSM-571<br>XO55 = XOSM-55<br>XO35 = XOSM-553 | C = 0.01 %<br>(100 ppm)<br>D = 0.005 %<br>(50 ppm)<br>E = 0.0025 %<br>(25 ppm) | T = 0 °C to + 70 °C<br>R = - 40 °C to + 85 °C | F = Pin 1 Open<br>E = Disable to Tristate | TAPE AND REEL<br>H = RF7<br><br>BULK<br>A = B04<br>(XO63, XO62, XO61)<br>C = D06<br>(XO57, XO37, XO27, XO17)<br>D = D07<br>(XO53, XO54, XO34, XO56, XOVC, XO55, XO35)<br>L = D08<br>(XO52, XO32, XO5M) | NA = No Additional Options<br>60 = 45/55 Symmetry<br><br>Contact factory for all other options | 4M = 4 MHz<br>40M = 40 MHz<br>100M = 100 MHz<br>12M288 = 12.288 MHz<br><br>M is used as decimal place holder in frequency |

Example: XO52CTELNA40M

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