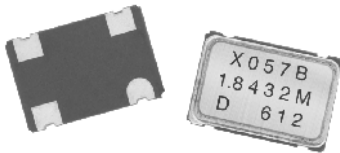


## Surface Mount Oscillator



The XOSM-57 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
- 5 V input voltage
- 100 % Lead (Pb)-free and RoHS compliant

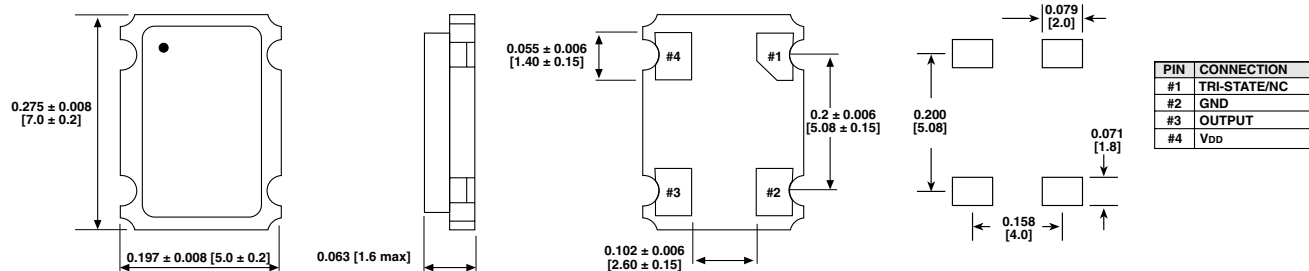

**RoHS**  
COMPLIANT

### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOSM-57
Frequency Range	$F_O$		1 MHz ~ 100.000 MHz
Frequency Stability*		All Condition*	$\pm 25$ ppm, $\pm 50$ ppm, $\pm 100$ ppm
Operating Temperature	$T_{OPR}$		0 °C ~ 70 °C (-40 °C ~ +85 °C option)
Storage Temperature Range	$T_{STG}$		-55 °C ~ +125 °C
Power Supply Voltage	$V_{DD}$		5.0 V $\pm$ 10 %
Aging (First Year)		25 °C $\pm$ 3 °C	$\pm 5$ 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	TTL Load		1 ~ 10 TTL
	HCMOS Load		30 pF Max
Start-up Time		$T_s$	10 ms Max
Pin 1, tri-state function			Pin 1 = H or open.... output active at pin 3 Pin 1 = L.... high impedance at pin 3

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

### DIMENSIONS in inches [millimeters]

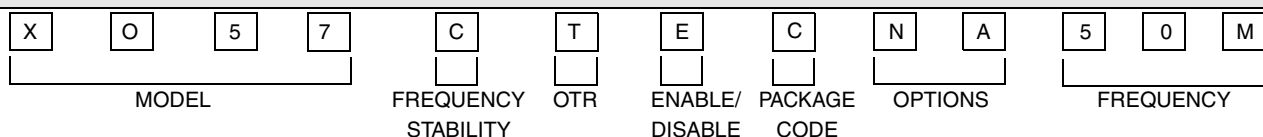


\*\*\*note: A 0.01  $\mu$ F bypass capacitor should be placed between  $V_{DD}$  (Pin4) and GND (Pin2) to minimize power supply line noise

### ORDERING INFORMATION

XOSM-57	B	R	E	50 M	e4
MODEL	FREQUENCY STABILITY	OTR	ENABLE/DISABLE	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE STANDARD
	AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) Standard	Blank = Standard R = -40 °C to +85 °C	E = Disable to Tristate		

### GLOBAL PART NUMBER





**GLOBAL PART NUMBERING**

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

Example: XO52CTELNA40M



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