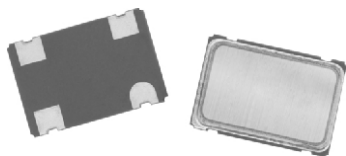


## Surface Mount Oscillator



The XOSM-57 series is an ultra miniature package clock oscillator with dimensions 7.0 mm x 5.0 mm x 1.9 mm. It is mainly used in portable PC and telecommunication devices and equipment.

### FEATURES

- Size: 7.0 x 5.0 x 1.9 (mm)
- Miniature package
- Tri-state enable/disable
- TTL/HCMOS compatible
- Tape and reel
- $I_R$  re-flow
- 5 V input voltage
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

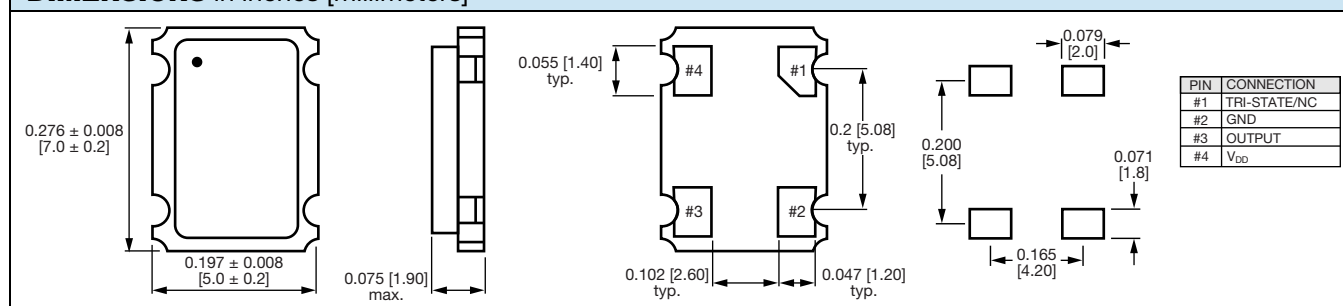
### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	VALUE
Frequency range	$F_O$	-	1.500 MHz to 100.000 MHz
Frequency stability <sup>(1)</sup>		all conditions	$\pm 25$ ppm, $\pm 50$ ppm, $\pm 100$ ppm
Operating temperature range	$T_{OPR}$	-	0 °C to 70 °C - 40 °C to + 85 °C (option)
Storage temperature range	$T_{STG}$	-	- 55 °C to + 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	$I_{DD}$	1.500 MHz to 20.000 MHz	20 mA max.
		20.001 MHz to 50.000 MHz	35 mA max.
		30.001 MHz to 100.000 MHz	45 mA max.
Output symmetry	Sym	at $\frac{1}{2} V_{DD}$	40 %/60 % (45 %/55 % option)
Rise/fall time	$t_r/t_f$	1.500 MHz to 67.000 MHz	10 ns
		67.001 MHz to 100.000 MHz	3 ns
Output voltage	$V_{OH}$	-	90 % $V_{DD}$ min.
	$V_{OL}$	-	10 % $V_{DD}$ max.
Output load		1.500 MHz to 67.000 MHz	10 TTL or 50 pF max.
		67.001 MHz to 100.000 MHz	15 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)

#### Note

<sup>(1)</sup> Include: 25 °C tolerance, operating temperature range, input voltage change, aging, load change, shock vibration

### DIMENSIONS in inches [millimeters]



#### Note

- A 0.01  $\mu$ F bypass capacitor should be placed between  $V_{DD}$  (pin 4) and GND (pin 2) to minimize power supply line noise

**ORDERING INFORMATION**

XOSM-57	B	R	E	50M	e4
MODEL	FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) standard	OTR blank = standard R = - 40 °C to + 85 °C	ENABLE/DISABLE E = disable to tri-state	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE standard

**GLOBAL PART NUMBER**

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

**GLOBAL PART NUMBERING OPTIONS**

X	O	5	7	C	T	E	C	N	A	4	0	M
<b>MODEL NUMBER</b> XO63 = XOSM-533 XO62 = XOSM-532 XO61 = XOSM-531 XO57 = XOSM-57 XO37 = XOSM-573 XO27 = XOSM-572 XO17 = XOSM-571				<b>FREQUENCY STABILITY</b> C = 0.01 % (100 ppm) D = 0.005 % (50 ppm) E = 0.0025 % (25 ppm)	<b>OPERATING TEMPERATURE (OTR)</b> T = 0 °C to + 70 °C R = - 40 °C to + 85 °C	<b>ENABLE/DISABLE</b> E = Disable to tristate	<b>PACKAGE CODE</b> <b>Tape and reel</b> H = RF7  <b>Bulk</b> A = B04 (XO63, XO62, XO61) C = D06 (XO57, XO37, XO27, XO17)	<b>OPTION</b> NA = No additional options 60 = 45/55 symmetry  Contact factory for all other options	<b>FREQUENCY</b> 4M = 4 MHz 40M = 40 MHz 100M = 100 MHz 12M288 = 12 288 MHz  M is used as decimal place holder in frequency			
Example: XO57CTECNA40M												

**PART MARKING**

Line 1:	M2804XXXXX (part number)
Line 2:	XX.XXXXM (frequency)
Line 3:	yywwvv (date/factory code)



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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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<http://moschip.ru/get-element>

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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