

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

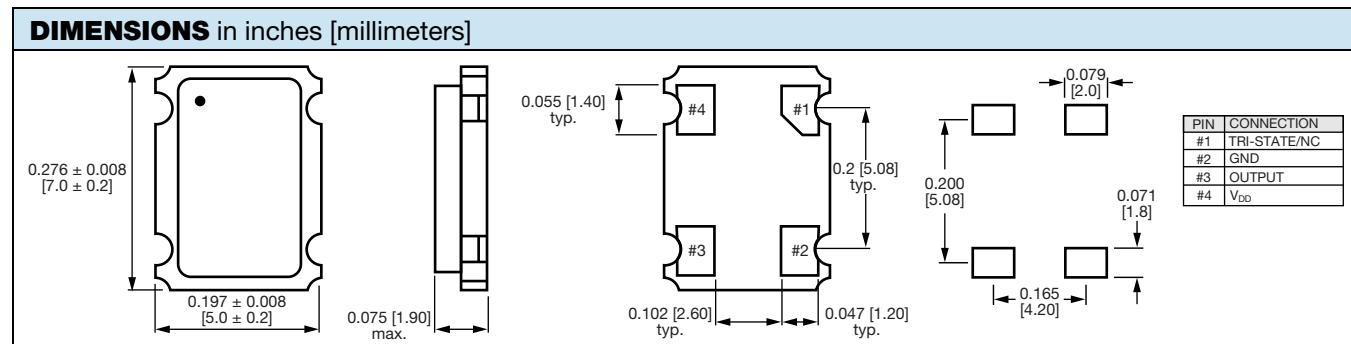


RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	VALUE
Frequency range	F_O	-	1.500 MHz to 100.000 MHz
Frequency stability ⁽¹⁾		all conditions	± 25 ppm, ± 50 ppm, ± 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 ± 10 %
Aging (first year)		25 °C ± 3 °C	± 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 $1/2 V_{DD}$	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

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

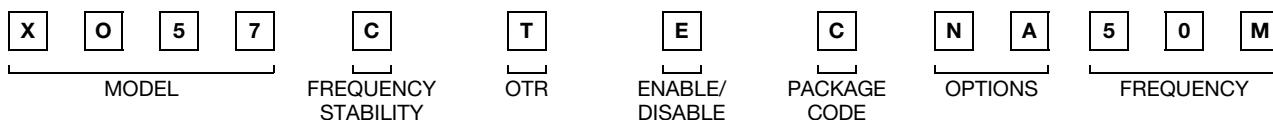


Note

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

GLOBAL PART NUMBER

GLOBAL PART NUMBERING OPTIONS

MODEL NUMBER	FREQUENCY STABILITY	OPERATING TEMPERATURE (OTR)	ENABLE/DISABLE	PACKAGE CODE	OPTION	FREQUENCY
XO63 = XOSM-533 XO62 = XOSM-532 XO61 = XOSM-531 XO57 = XOSM-57 XO37 = XOSM-573 XO27 = XOSM-572 XO17 = XOSM-571	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	E = Disable to tristate	Tape and reel H = RF7 Bulk A = B04 (XO63, XO62, XO61) C = D06 (XO57, XO37, XO27, XO17)	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: XOSM-57CTECNA40M

PART MARKING

Line 1: M2804XXXX (part number)
Line 2: XX.XXXXM (frequency)
Line 3: yywwvv (date/factory code)

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

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