

Surface Mount Oscillator



The XOSM-571 series is an ultra miniature package clock oscillator with dimensions 7.0 x 5.0 x 1.5 mm. It is mainly used in portable PC and telecommunication devices and equipment.

FEATURES

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

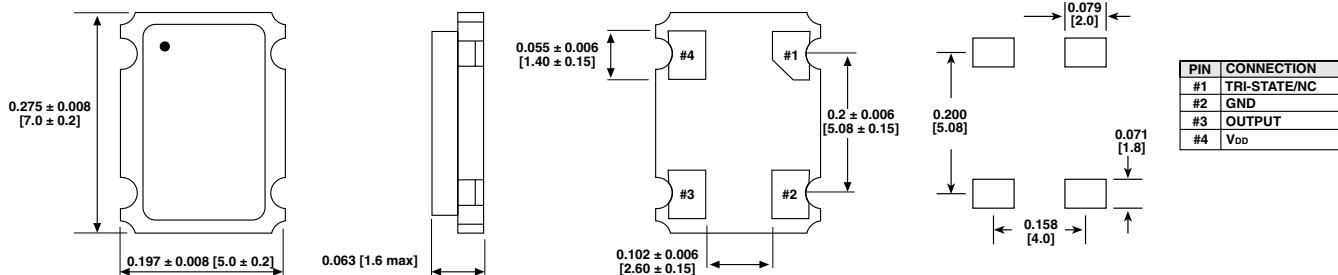


RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	XOSM-571
Frequency Range	F _O		1 MHz ~ 100.000 MHz
Frequency Stability*		All Condition*	± 25 ppm, ± 50 ppm, ± 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}		1.8 V ± 10 %
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I _{DD}	1.000 MHz to 23.999 MHz	10 mA Max
		24.000 MHz to 49.999 MHz	12 mA Max
		50.000 MHz to 69.999 MHz	15 mA Max
		70.000 MHz to 100.000 MHz	25 mA Max
Output Symmetry	Sym	At 1/2 V _{DD}	40/60 % (45/5 5% Option)
Rise Time	T _r	10 % V _{DD} ~ 90 % V _{DD}	6 ns Max
Fall Time	T _f	90 % V _{DD} ~ 10 % V _{DD}	6 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		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 µF bypass capacitor should be placed between V_{DD} (Pin4) and GND (Pin2) to minimize power supply line noise

ORDERING INFORMATION					
XOSM-571 MODEL	B FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100ppm)	R OTR Blank = Standard R = - 40 °C to + 85 °C	E ENABLE/DISABLE E = Disable to Tristate	50 M FREQUENCY/MHz	e4 JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER													
X	O	1	7	C	T	E	C	N	A	5	0	M	
MODEL				FREQUENCY STABILITY		OTR	ENABLE/DISABLE	PACKAGE CODE		OPTIONS		FREQUENCY	



GLOBAL PART NUMBERING						
MODEL NUMBER	FREQUENCY STABILITY	OPERATING TEMPERATURE (OTR)	ENABLE/DISABLE	PACKAGE CODE	OPTIONS	FREQUENCY
X O 5 2 XO53 = XO-53 XO54 = XO-54 XO34 = XO-543 XO52 = XO-52 XO32 = 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 C = 0.01 % (100 ppm) D = 0.005 % (50 ppm) E = 0.0025 % (25 ppm)	T T = 0 °C to +70 °C R = -40 °C to +85 °C	E F = Pin 1 Open E = Disable to Tristate	L 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)	N A NA = No Additional Options 60 = 45/55 Symmetry Contact factory for all other options	4 0 M 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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