

Surface Mount Oscillator



The XOSM-533 series is an ultra miniature package clock oscillator with dimensions 5.0 x 3.2 x 1.3 mm. It is mainly used in portable PC and telecommunication devices and equipment.

FEATURES

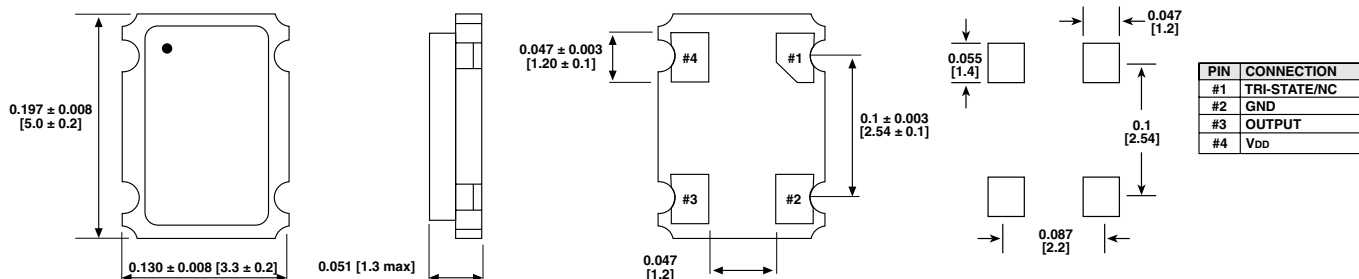
- 5 x 3.2 x 1.3 Miniature Package
- Tri-state enable/disable
- HCMOS compatible
- Tape and Reel
- IR Re-flow
- 3.3 V input voltage
- Lead (Pb)-free terminations and RoHS compliant



STANDARD ELECTRICAL SPECIFICATIONS			
PARAMETER	SYMBOL	CONDITION	XOSM-533
Frequency Range	F_o		1.544 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}		3.3 V ± 10 %
Aging (First Year)		25 °C ± 3 °C	± 5 ppm
Supply Current	I_{DD}	1.544 MHz to 9.999 MHz	8 mA Max
		10.000 MHz to 34.999 MHz	10 mA Max
		35.000 MHz to 49.999 MHz	25 mA Max
		50.000 MHz to 100.000 MHz	35 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}	7 ns Max
Fall Time	T_f	90 % V_{DD} ~ 10 % V_{DD}	7 ns Max
Output Voltage	V_{OH}		90 % V_{DD} Min
	V_{OL}		10 % V_{DD} Max
Output Load	HCMOS Load		30 pF Max (15 pF typ.)
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 μ F bypass capacitor should be placed between V_{DD} (Pin4) and GND (Pin2) to minimize power supply line noise

ORDERING INFORMATION

XOSM-533 MODEL	B FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) Standard	R OTR Blank = Standard R = - 40 °C to + 85 °C	E ENABLE/DISABLE E = Disable to Tristate	50 M FREQUENCY/MHz	e2 JEDEC LEAD (Pb)-FREE STANDARD
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GLOBAL PART NUMBER

X	O	6	3	C	T	E	A	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
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 = 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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