

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

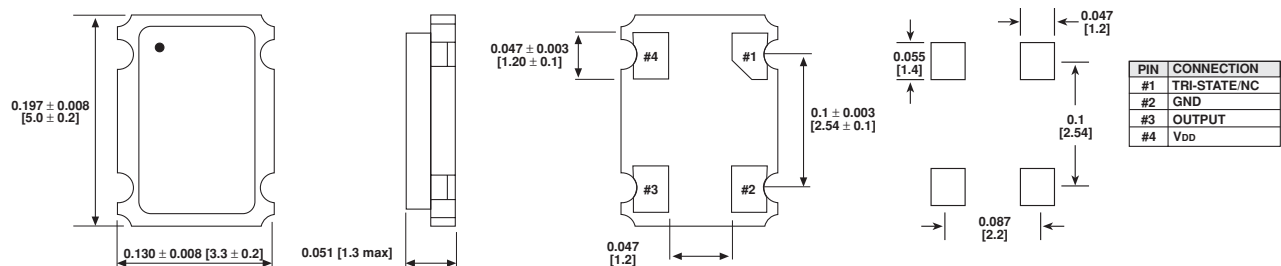
- 5 x 3.2 x 1.3 Miniature Package
- Tri-state enable/disable
- HCMOS compatible
- Tape and Reel
- IR Re-flow
- 3.3V input voltage

STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOSM-533
Frequency Range	F_O		1.544MHz ~ 100.000MHz
Frequency Stability*		All Condition*	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$
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}		3.3V $\pm 10\%$
Aging (First Year)		25°C $\pm 3^\circ\text{C}$	$\pm 5\text{ppm}$
Supply Current	I_{DD}	1.544MHz to 9.999MHz	8mA Max
		10.000MHz to 34.999MHz	10mA Max
		35.000MHz to 49.999MHz	25mA Max
		50.000MHz to 100.000MHz	35mA Max
Output Symmetry	Sym	At $\frac{1}{2} V_{DD}$	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		30pF Max (15pF typ.)
Start-up Time		T_s	10mS 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-533 MODEL	B FREQUENCY STABILITY	R OTR	E ENABLE/DISABLE	50M FREQUENCY/MHZ
	AA = 0.0025% (25PPM) A = 0.005% (50PPM) B = 0.01% (100PPM) Standard	Blank = Standard R = - 40°C to + 85°C	E = Disable to Tristate	