

Vishay Dale

Surface Mount Oscillator



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

FEATURES

- Size: 5.0 x 3.2 x 1.3 (mm)
- Miniature package
- Tri-state enable/disable
- HCMOS compatible
- Tape and reel
- I_R re-flow
- 3.3 V input voltage
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

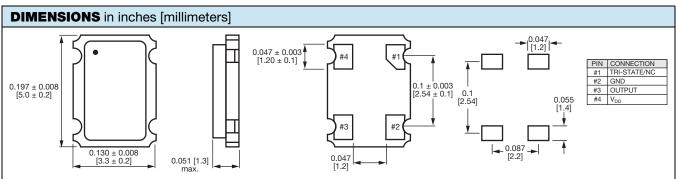


HALOGEN **FREE**

STANDARD ELECTRICAL SPECIFICATIONS								
PARAMETER	SYMBOL	CONDITION	VALUE					
Frequency range	Fo	-	1.544 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}	-	3.3 V ± 10 %					
Aging (first year)		25 °C ± 3 °C	± 5 ppm					
		1.544 MHz to 9.999 MHz	8 mA max.					
Supply current	I _{DD}	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} to 90 % V_{DD}	7 ns max.					
Fall time	t _f	90 % V_{DD} to 10 % V_{DD}	7 ns max.					
Output voltage	V _{OH}	-	90 % V _{DD} min.					
Output voltage	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)					
FIII I, III-SIAIE IUIICIIOII		-	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



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

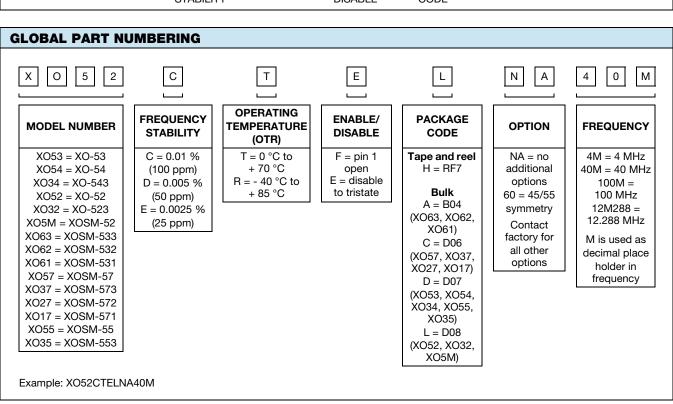
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ORDERING INFORMATION											
XOSM-533	В	R	E	50 M	e2						
MODEL	FREQUENCY STABILITY AA = 0.0025 % (25 ppm) A = 0.005 % (50 ppm) B = 0.01 % (100 ppm) standard	OTR blank = standard R = -40 °C to +85 °C	ENABLE/DISABLE E = disable to tri-state	FREQUENCY/MHz	JEDEC LEAD (Pb)-FREE standard						

GLOBAL PART NUMBER								
X 0 6 3 MODEL	FREQUENCY STABILITY	T OTR	ENABLE/ DISABLE	A PACKAGE CODE	N A OPTIONS	5 0 M FREQUENCY		



PART MARKING

Line 1: M2807XXXXX (part number)
Line 2: XX.XXXXM (frequency)
Line 3: yywwv (date/factory code)

Document Number: 35060 Revision: 08-Mar-11





Vishay

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