

Low EMI SMD Oscillator 5.0mm x 3.2mm Package



RoHS
Compliant



Features

- Spread Spectrum Clock Oscillators
- Lower Power Consumption
- Excellent solderability
- Integrated PLL
- Output Enable w/internal pull-up (default enable)
- Rohs Compliant

Electrical Specifications

Frequency Range		16.000 to 67.000		MHz
Temperature Stability		± 100 to ±20		PPM Max
Aging per Year		±3		
Operating Temperature Range	Standard	-20 to +70		°C
	Extended	-40 to +85		
Storage Temperature Range		-55 to +125		
Supply Voltage		+2.5 ± 5%	3.3V ± 10%	
Input Current	16.000 to 50.000MHz	20	20	mA Max
	50.100 to 67.000MHz	20	25	
Output Voltage	Logic High (Voh)	90%		Vdd Min
	Logic Low (Vol)	10%		Vdd Max
Output Symmetry	Standard	40 to 60		%
	Tight	45 to 55		
Output Level		CMOS		
Output Load		15		HCMOS
Rise and Fall Time	16.000 to 50.000MHz	5	10	ns Max
	50.100 to 67.000MHz	4	8	
Enable-Disable Function		Tri-State		-

Spread Spectrum Modulation

Center Spread	±0.125% to ±2.0%
Down Spread	-0.25% to -4.0%

Temperature stability is inclusive of all Conditions : Calibration Tolerance at +25 °C, frequency stability over the operation temperature range , supply voltage, supply voltage change, output load change, shock, vibration, and 1st year aging at +25 °C

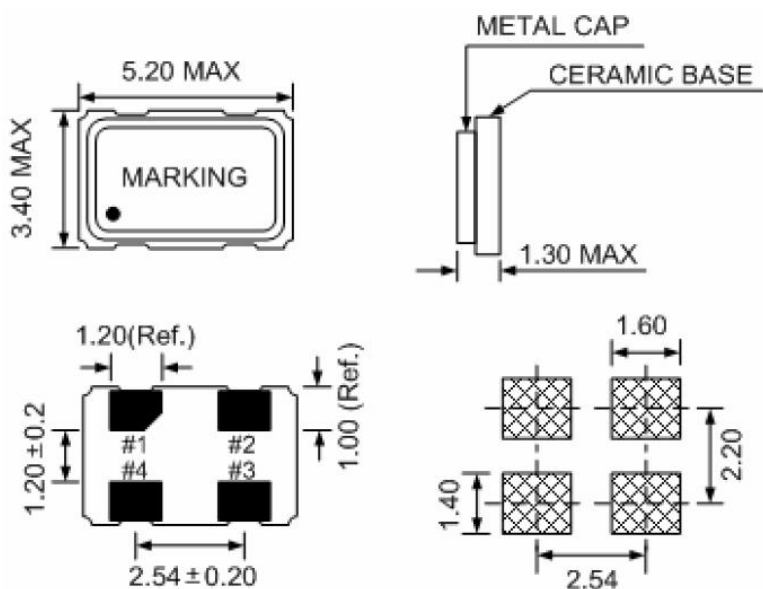
WSO50LE

Part Numbering System

Type	Frequency Stability (PPM)			Supply Voltage (Vdd)		Frequency (MHz)	Duty Cycle (*1)		Extended Temperature (*1)	Tape & Reel
	10	05	± 100	33	+ 3.3		T	45/55%		
WSO50LE	05	02	± 50 ± 20	25	+ 2.5	16.000 to 67.000			EXT	TR

Example : WSO50LE10-33-24.576-15-TR
 WSO50LE05-50-50.000-EXT-15-TR
 WSO50LE02-33-32.000-T-50-TR

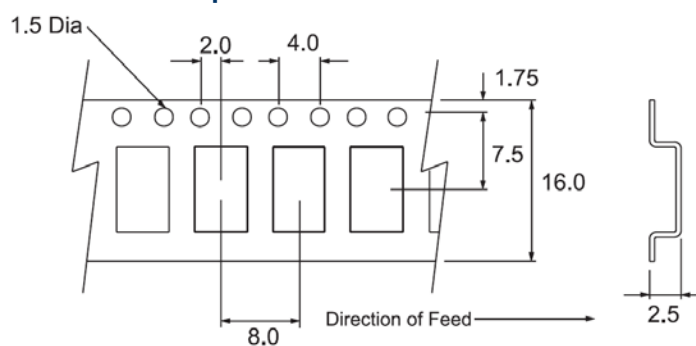
Mechanical Outline



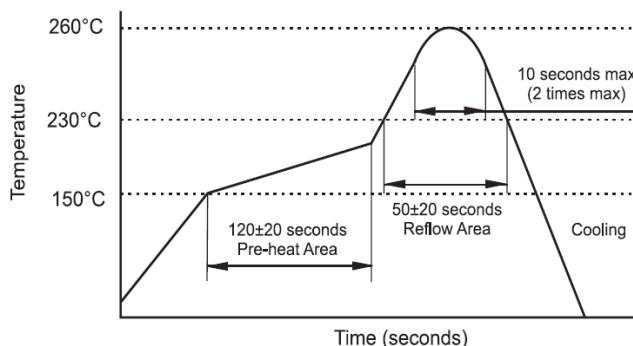
Pin	Function
1	OE Function
2	Ground
3	Clock Output
4	VDD

Enable / Disable Function	
Input (#1)	Output (#3)
High (Open)	Operating
Low	High Impedance

Carrier Tape Dimensions



Solder Reflow Characteristics



Notes:

- 1 - Standard Duty Cycle and Standard Temperature Range, do not need to be included in Part Number description.
- 2 - Product is shipped in Tape and Reel configuration. Each reel contains 1000 pieces.
- 3 - Specification subject to change without notice.