

### Surface Mount Clock Oscillator 14.0mm x 9.8mm Package



#### Features

- Thermoplastic Package
- Suitable for reflow soldering
- Rohs Compliant



#### Electrical Specifications

Frequency Range	+3.3V	1.000 to 155.520		MHz
	+5.0V	1.000 to 80.000		
Temperature Stability	± 100 to ±20			PPM Max
Aging per Year	±3			
Operating Temperature Range	Standard	-10 to +70		°C
	Extended	-40 to +85		
Storage Temperature Range	-55 to +125			
Supply Voltage	3.3 ± 10%		5.0 ± 10%	
Input Current	1.000 to 30.000MHz	15	15	mA Max
	30.100 to 60.000MHz	30	40	
	60.100 to 70.000MHz	35	40	
	70.100 to 155.520MHz	60	-	
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 Load	+3.3V	30		pF HCMOS
	+5.0V	50		
Rise and Fall Time	1.000 to 32.000MHz	8	8	ns Max
	32.100 to 50.000MHz	6	6	
	50.100 to 70.000MHz	5	6	
	70.100 to 155.520MHz	4	-	
Standby Current	1.000 to 32.000MHz	High Z	High Z	uA Max
	32.100 to 50.000MHz	3	High Z	
	50.100 to 70.000MHz	10	High Z	
	70.100 to 155.520MHz	High Z	-	
Enable-Disable Function	Tri-State			-
Output Disable Time	100			ns Max
Output Enable Time	10			ms Max
Start Up Time	10			ms Max

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 1<sup>st</sup> year aging at +25 °C

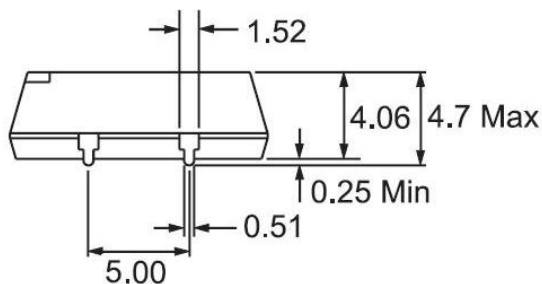
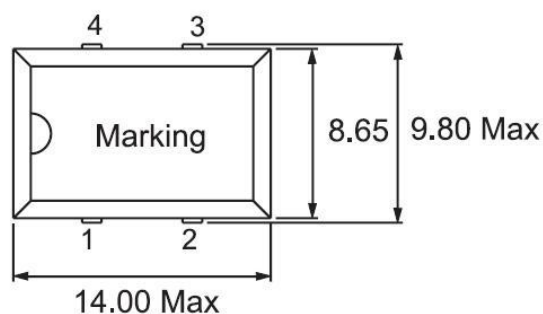
## WSO140

### Part Numbering System

Type	Frequency Stability (PPM)		Supply Voltage (Vdd)		Frequency (MHz)	Duty Cycle (*1)		Extended Temperature (*1)	Tape & Reel
	10	± 100	50	+ 5.0 ± 10%		T	45/55%		
WSO140	05	± 50	33	+ 3.3 ± 10%	1.000 to 155.520			EXT	TR
	02	± 20							

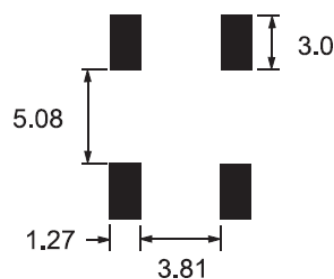
**Example :** WSO14010-33-24.576-TR, WSO14005-50-50.000-EXT-TR, WSO14002-33-32.000-T-TR

### Mechanical Outline



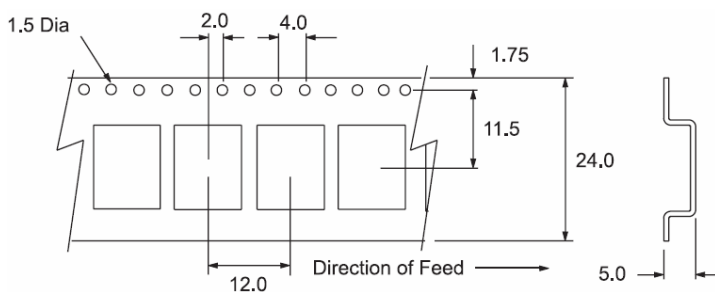
Package is Thermoplastic

### PCB Solder Pad Layout



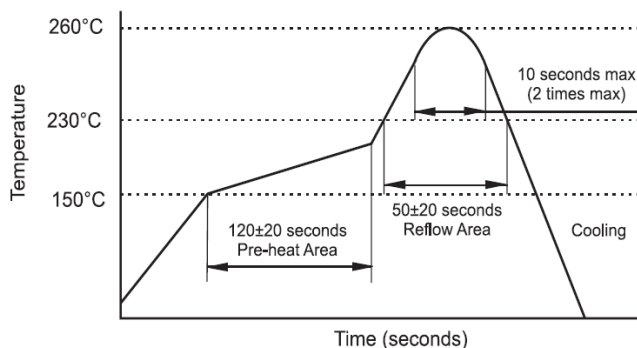
Enable/Disable Function	
Pin 1	Pin 3
INH	Output
High or Open	Operating
Low	High Impedance

### Solder Reflow Characteristics



(Dimensions are millimeters)

### Carrier Tape Dimensions



#### Notes:

- 1 - Standard Duty Cycle and 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.