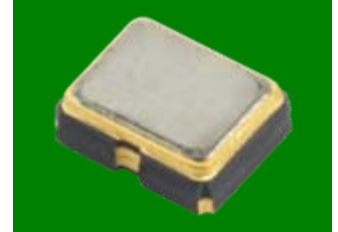


## Clock Oscillator Unit 2.5 x 2.0mm SMD Package Features

- Ultra Small Package
- Excellent for high density packaging
- Suitable for reflow soldering
- Rohs Compliant



## Electrical Specifications

Frequency Range		2.000 to 50.000			MHz	
Temperature Stability		±100			PPM Max	
		±50				
		±30				
		±25				
Aging Per Year		±3				
Operating Temperature Range		Standard	-10 to +70		°C	
		Extended	-40 to +85			
Storage Temperature Range		-55 to +125				
Supply Voltage		1.8 ±5%	2.5 ±5%	3.3 ±5%	Vdd	
Input Current		2.000 – 10.000MHz	3	6	mA Max	
		10.100 – 20.000MHz	5	8		
		20.100 – 32.000MHz	5	8		12
		32.100 – 50.000MHz	10	20		20
Output Voltage		Logic Low (Voh)	90%		Vdd Min	
		Logic High (Vol)	10%		Vdd Max	
Output Symmetry (Duty Cycle)		Standard	40 – 60		%	
		Tight	45 – 55			
Output Load		15			pF	
Output Level		CMOS			-	
Rise and Fall Time		7			ns Max	
Phase Jitter (12KHz – 20KHz)		1			pF Max RMS	
Standby Function		Tri-state			-	
Start Up Time		10			ms Max	

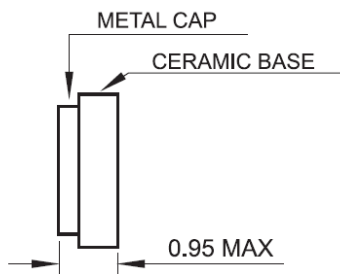
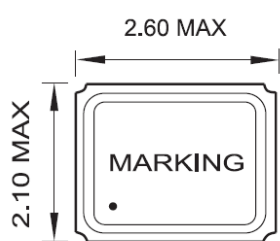
Temperature stability is inclusive of all Conditions : Calibration Tolerance at +25 °C, frequency stability over the operation temperature range , supply voltage, supply voltage change, output load change, shock, vibration, and 1<sup>st</sup> year aging at +25 °C

### Part Numbering System

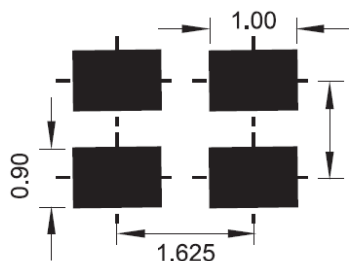
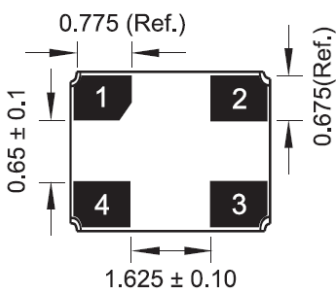
Type	Frequency Stability (PPM)		Supply Voltage (Vdd)		Frequency (MHz)	Duty Cycle (*1)		Extended Temperature (*1)	Tape & Reel
WSO25	10	± 100	33	+ 3.3 ± 10%	2,000 to 50,000	T	45/55%	EXT	TR
	05	± 50	25	+ 2.5 ± 5%					
	03	± 30	18	+ 1.8 ± 5%					
	025	± 25							

**Example :** WSO2510-33-24.576-TR, WSO2505-33-50.000-EXT-TR, WSO2503-33-32.000-T-EXT-TR

### Mechanical Outline



Pin 1	Pin 3
INH	Output
High or Open	Operating
Low	High Impedance

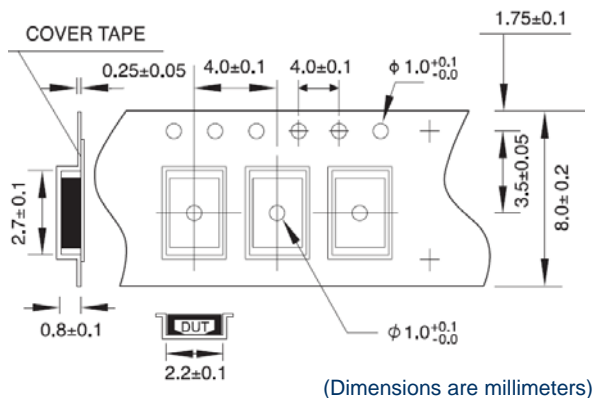


#1 : E/D    #2 : GND  
#4 : VDC    #3 : OUTPUT

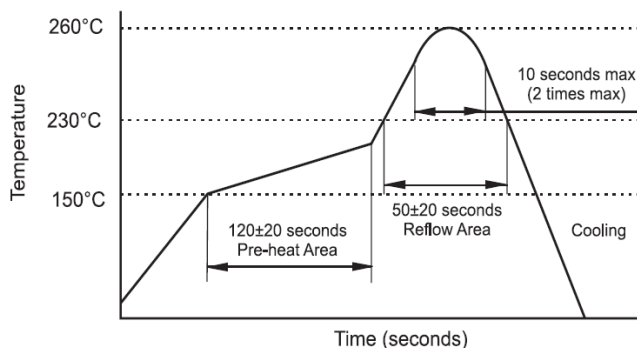
Package is Seam Sealed Ceramic-metal

Bottom

### Solder Reflow Characteristics



### 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.