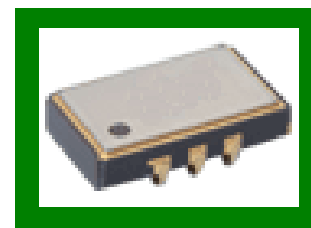


WSV11H

Wavetron

Voltage Controlled Clock Oscillator Unit 11.4 x 9.8mm Surface Mount Package



Features

- HCMOS/TTL
- 3.3V /5.0V Operation
- Ceramic 6 J-Lead Package, Seam Seal
- Low power consumption
- RoHS Compliant

Electrical Specifications

Frequency Range	1.000 ~ 200.000		MHz
Frequency Stability	±100 ~ ±25		PPM Max
Aging Per Year	±5		
Operating Temperature Range	Standard	0 ~ +70	°C
	Extended	-40 ~ +85	
Storage Temperature Range	-55 ~ +125		
Input Voltage	3.3 ±10%	5.0 ±10%	V
Control Voltage	1.65 ±1.35	2.50 ±2.00	
Input Current	55		mA Max
Pulling Range	±50 ~ ±130		ppm min
Output Voltage	0 Level (Vol)	10%	Vdd Max
	1 Level (Voh)	90%	Vdd Min
Output Symmetry (Duty Cycle)	Standard	40 ~ 60	%
	Tight	45 ~ 55	
Output Load	HCMOS-TTL/15pF or 10TTL		
Rise & Fall Time	10		ns Max
Start Up time	10		ms Max
Linearity	±10		%

Rise / Fall time

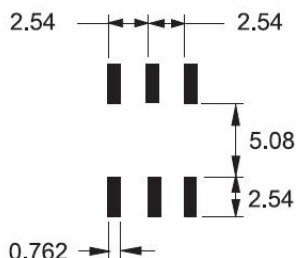
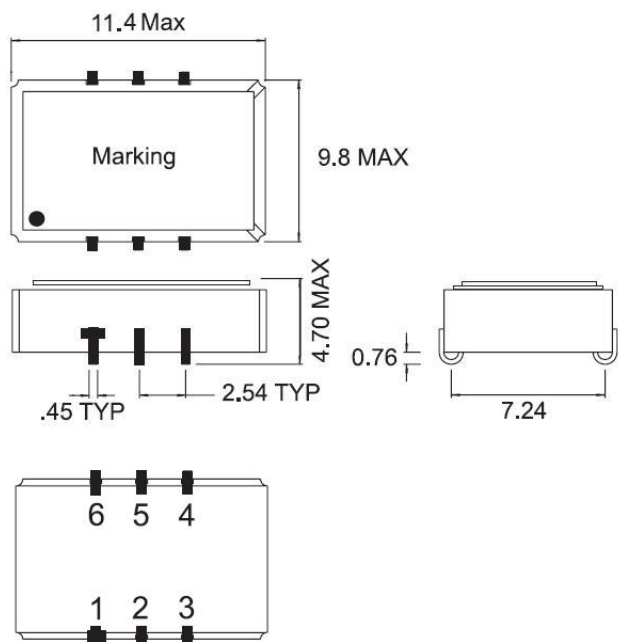
- 1MHz ≤ F ≤ 20MHz : 10ns max
- 20MHz < F ≤ 40MHz : 8ns max
- 40MHz < F ≤ 80MHz : 5ns max
- 80MHz < F ≤ 200MHz : 10ns max (multi)

Part Numbering System

Type	Frequency Stability (PPM)		Supply Voltage (Vdd)		Frequency (MHz)	Duty Cycle (*1)		Extended Temperature (*1)	Pulling Range (ppm min)		Tape & Reel
	10 05 02	± 100 ± 50 ± 20	50 33	+ 5.0 + 3.3		T	45/55 %		50 80 100 130	±50 ±80 ±100 ±130	
WSV11H	10 05 02	± 100 ± 50 ± 20	50 33	+ 5.0 + 3.3	1.000 to 200.000	T	45/55 %	EXT	50 80 100 130	±50 ±80 ±100 ±130	TR

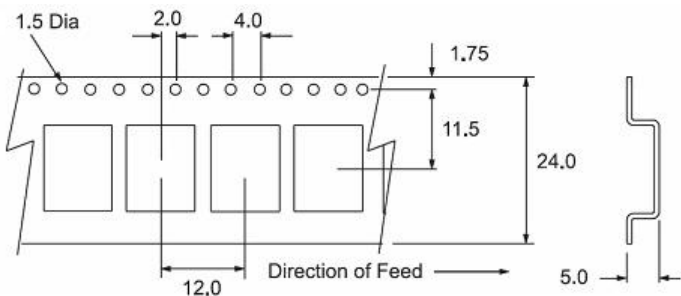
Examples : WSV11H05-50-12.000-100-TR, WSV11H10-33-48.000-T-EXT-80-TR

Mechanical Outline



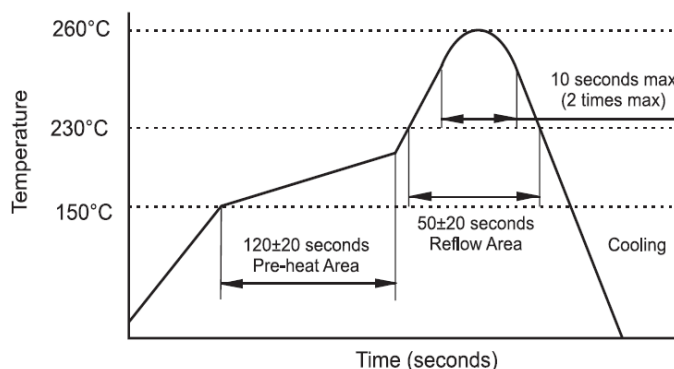
Pin	Function
1	V Control
2	E/D
3	Ground
4	Output
5	N/C
6	VCC

Carrier Tape Dimensions



(Dimensions are millimeters)

Solder Reflow Characteristics



Notes:

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