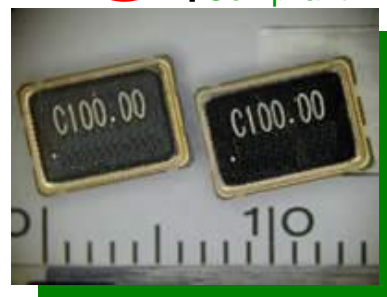


LVPECL SMD Oscillator 7.0mm x 5.0mm Package



RoHS
Compliant



Features

- LVPECL Complementary output
- Low phase jitter (12KHz to 20MHz) under 4 ps (RMS)
- Low profile package design (**1.9mm height max.**)
- Special side-pad design for **jitter improvement option** (patent applying)
- RoHS compliance

Electrical Specifications

Frequency Range		10.000 to 625.000	MHz
Frequency Stability		± 100 to ±25	PPM Max
Aging per Year		±3 / per year	
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 ± 5%	
Input Current		100	mA Max
Output Voltage	0 Level (Vol)	Vcc-1.63	Vdc Max
	1Level (Voh)	Vcc-1.02	Vdc Min
Output Symmetry	Standard	40 to 60	%
	Tight	45 to 55	
Output Load		50Ω to Vcc-2.0Vdc	
Rise and Fall Time		1.0	ns Max
Start up time		10	ms Max
Tri-state Output (pin1)		High or Open : OSC, Low : High Impedance	
Phase Jitter (12KHz ~ 20MHz)		1ps RMS Max	

Phase Jitter

16MHz ≤ F ≤ 200MHz : 1ps RMS max

200.001MHz < F ≤ 625MHz : 3ps RMS max (12KHz ~ 20MHz)

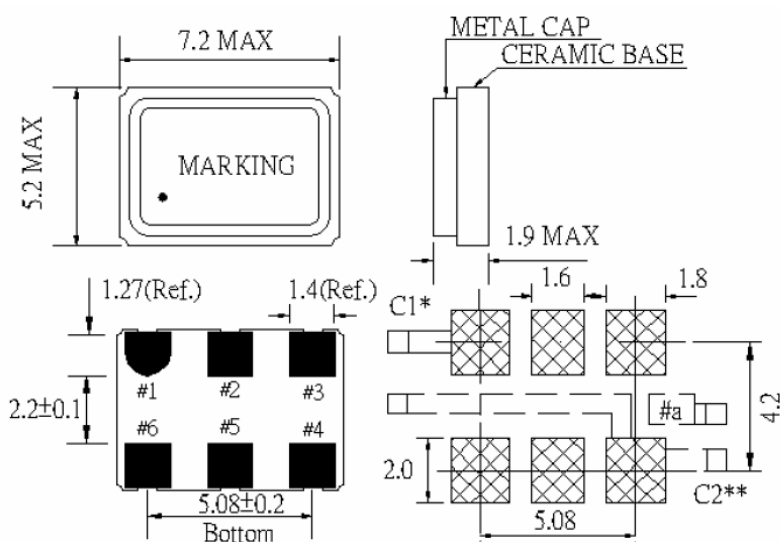
Temperature stability is inclusive of all Conditions : Calibration Tolerance at +25 °C, frequency stability over the operation temperature range , supply voltage, supply voltage change, output load change, shock, vibration, and 1st year aging at +25 °C

Part Numbering System

Type	Frequency Stability (PPM)		Supply Voltage (Vdd)		Frequency (MHz)	Duty Cycle (*1)		Extended Temperature (*1)	Tape & Reel
	10	±100	33	+3.3		T	45/55%		
WSO70LV	05	±50	25	+2.5	16.000 to 625.000			EXT	TR
	02	±20							

Example : WSO70LV10-33-24.576-T-EXT-TR
 WSO70LV05-50-50.000-EXT-TR
 WSO70LV02-33-32.000-TR

Mechanical Outline

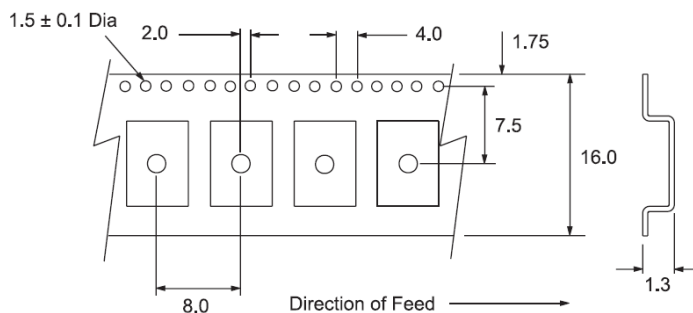


Pin	Function
1	E/D
2	N/C
3	Ground
4	Output
5	Comp. Output
6	VCC

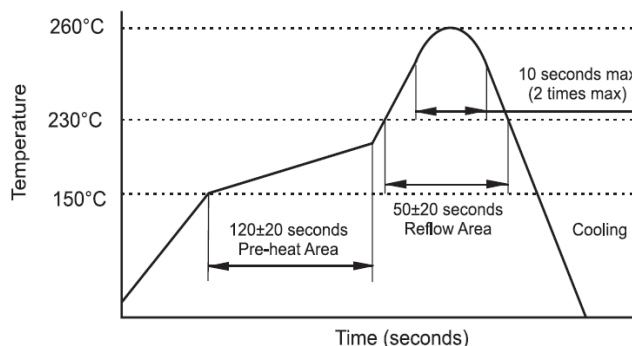
Enable / Disable Function	
Input (#1)	Output (#3, #4)
High (Open)	Operating
Low	High Impedance

C1: 0.01uF or 0.1uF decoupling capacitor is recommended
 C2: By-pass capacitor for the noise suppression

Carrier Tape Dimensions



Solder Reflow Characteristics



Notes:

- 1 - Standard Duty Cycle, Standard Temperature Range and Standard Pin Connection, 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.