CF2600B2IS9E156.250000

High Performance Differential Oscillator

Features

Crystal Oscillator P/N: **CF2600B2IS9E156.250000**
Frequency: **156.25MHz**
Output Signal Type: **LVPECL**
Supply Voltage: **2.5V** ±10%
RMS Phase Jitter: **0.1ps** 12KHz ~ 20MHz Frequency Band
Frequency Stability: **±70 ppm**
Operating Temperature Range: -40 ~ +105℃
Storage Temperature Range: -55 ~ +125℃
Environmental Compliance: RoHS/REACH/Pb-free/Halogen Free/MSL 1

Applications

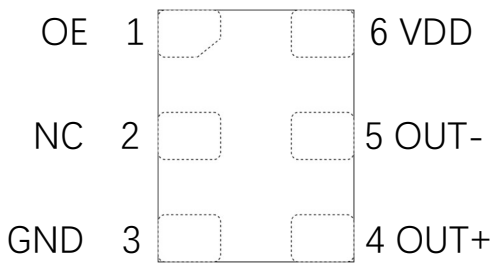
Network equipment (Router, Switch, Optical module, etc.)
Telecom, instrumentation, storage, server

Pin Description

Pin#	Pin Name	I/O	Function
1	OE	Input	H or Open: Enable Output; L: Output High Impedance
2	NC	NA	No Connection
3	GND	Ground	Ground
4	OUT+	Output	Oscillator Output
5	OUT-	Output	Complementary Oscillator Output
6	VDD	Power	Power Supply Voltage

Pin Assignments

Top View



Ordering Information

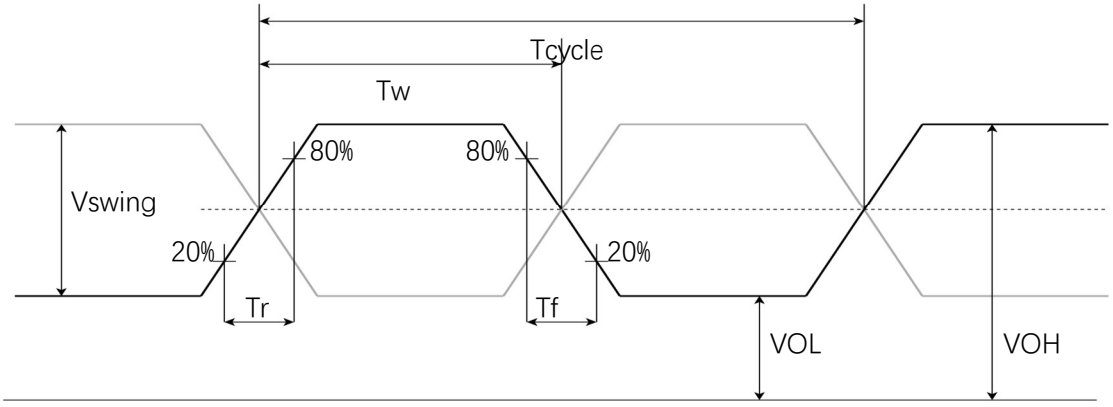
Part/Order Number	Marking	Package	MPQ	Temperature
CF2600B2IS9E156.250000	4e156	2520	3000	-40 ~ +105℃

Electrical Characteristics

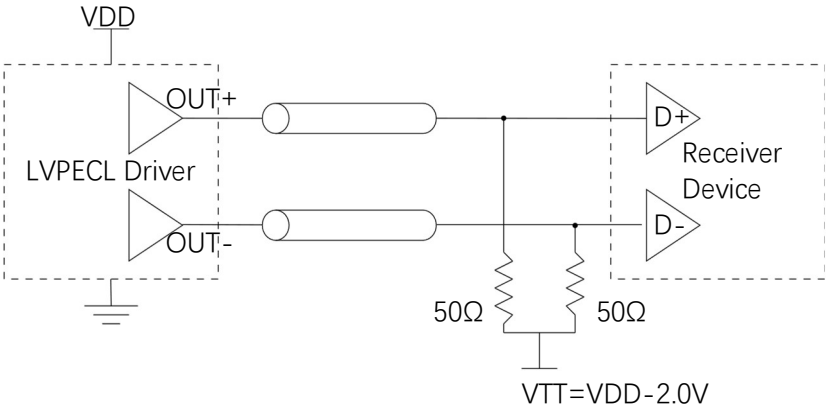
Parameters	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	Vdd		2.25	2.5	2.75	V
Output Frequency	Fout		156.250000			MHz
Frequency Stability		**Note 1**	±70			ppm
Input Voltage High	VIH		70%			Vdd
Input Voltage Low	VIL				30%	Vdd
Duty Cycle	DC	=Tw/Tcycle *100%	45		55	%
Current Consumption	Idd	OE = High			50	mA
OE Disable Supply Current	I_od	OE=Low			30	uA
Output High Voltage	VOH		Vdd-1.0			V
Output Low Voltage	VOL				Vcc-1.6	V
Output Differential Voltage Swing	Vswing		0.8		1.6	V
Rise/Fall Time	Tr, Tf	20%, 80%		0.2	0.4	ns
Start-up Time	T_start				10	ms
OE Enable Time	T_oe				2	ms
OE Disable Time	T_od				200	ns
RMS Phase jitter	RMS	12K ~ 20MHz Freq. Band			0.1	ps

Note 1: Includes conditions: initial tolerance, operating temperature, rated power supply voltage, and load changes

Waveform Diagrams

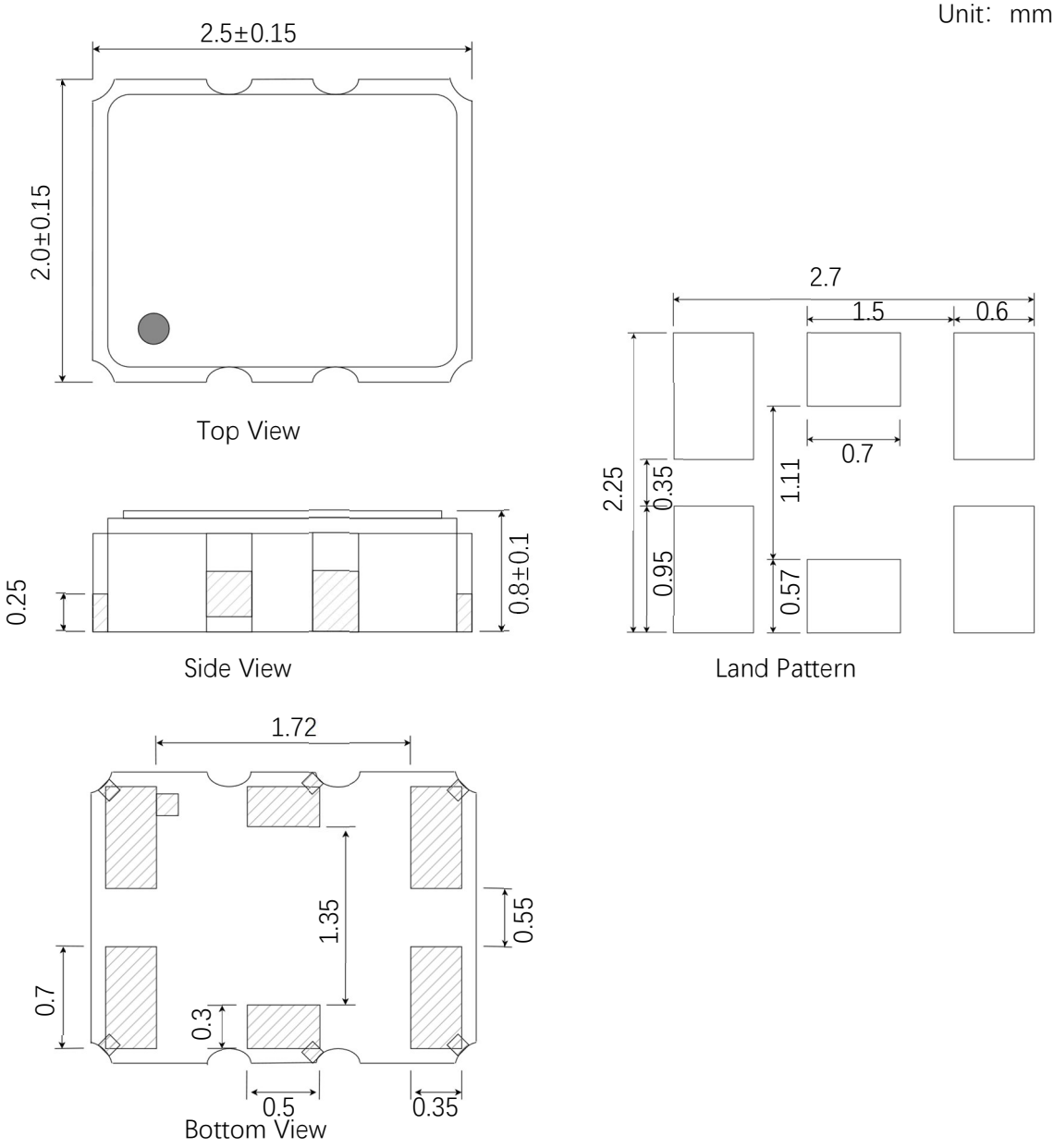


Termination Diagrams



Dimensions and Patterns

Unit: mm

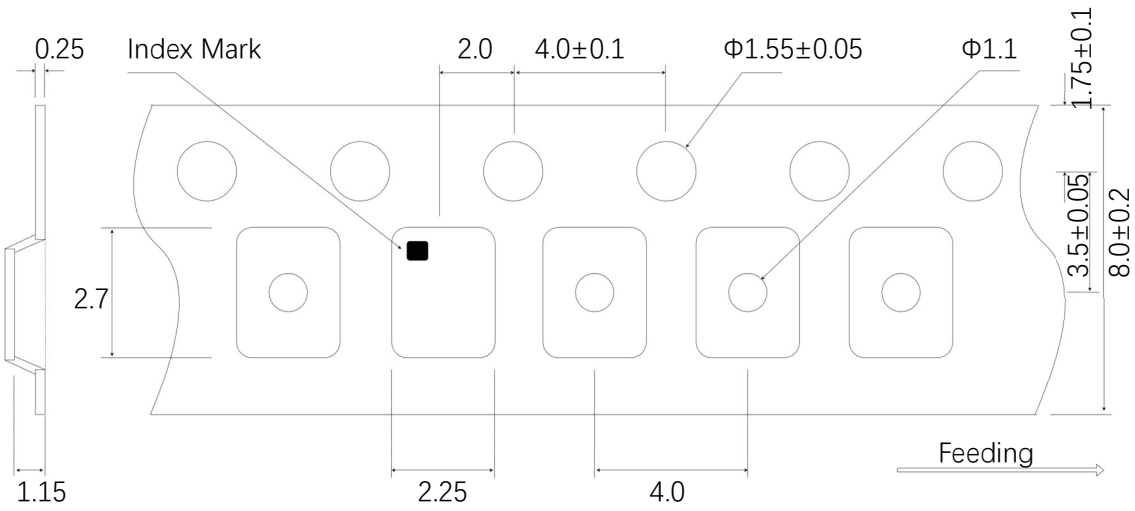


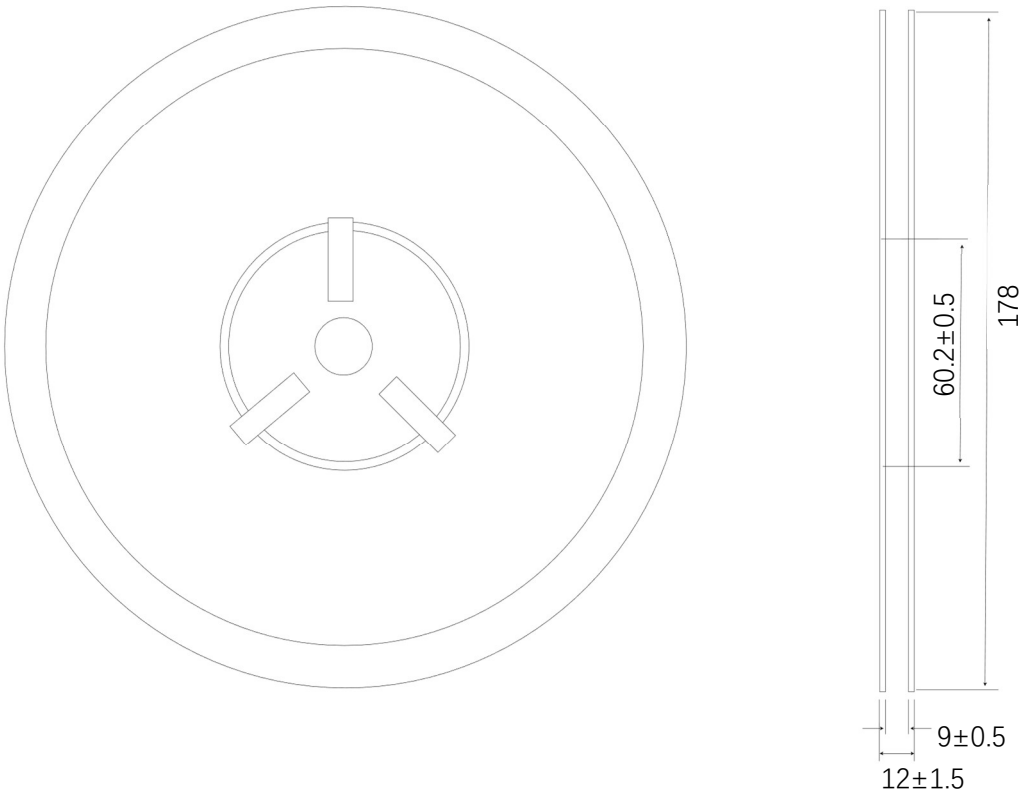
Marking



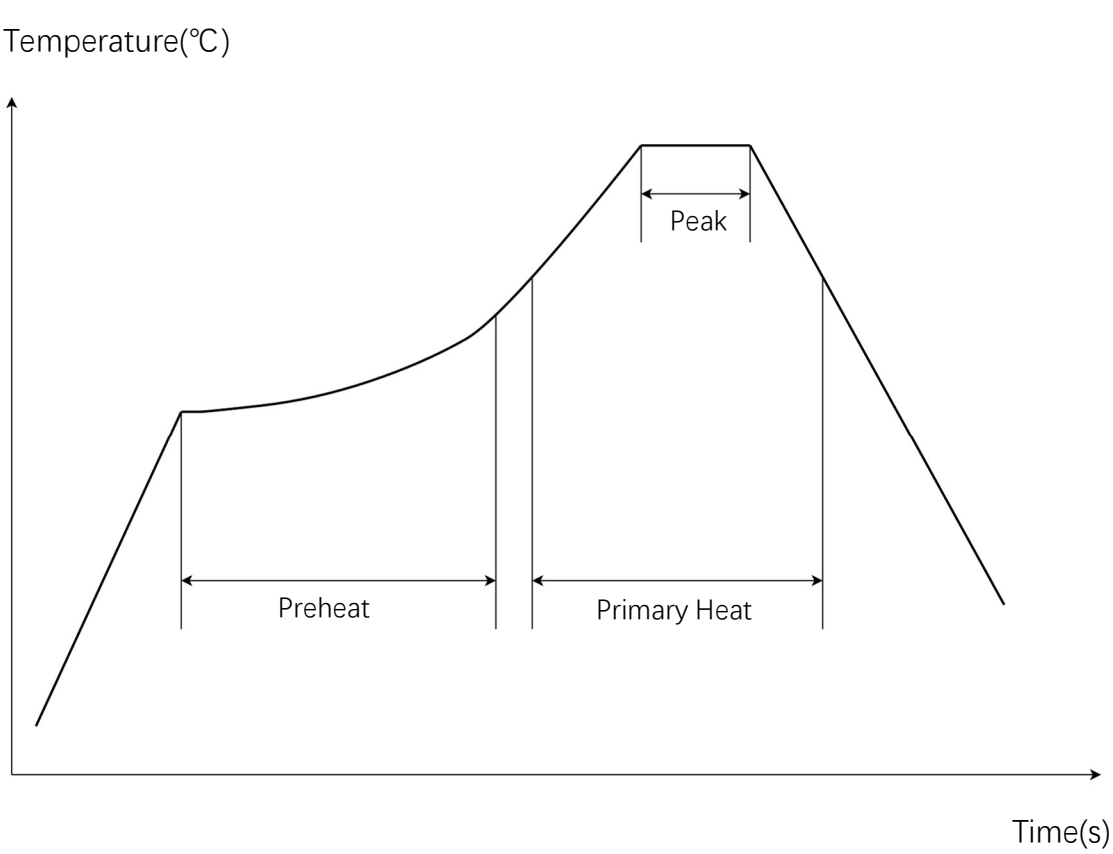
Tape and Reel

Unit: mm





Reflow Profile



Stage	Temperature (℃)	Time (second)
Preheat	150-200	60 ~ 120
Primary Heat	217	60 ~ 150
Peak	260	10

Revision History

Revisions	Release Date	Change Summary
0.1	Feb.13,2025	Initial Release