

# CRYSTAL CLOCK OSCILLATORS

## Programmable Type

### 1880VE • 1880WE SERIES

#### ■ Features

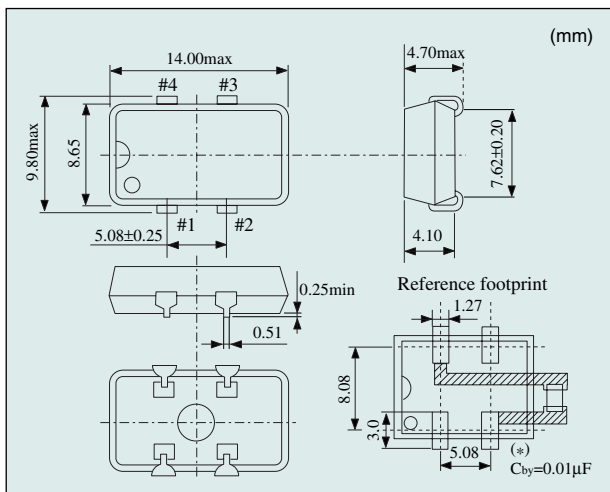
- Directly drives TTL IC.
- The PLL technology enables this series to cover the frequency range from 1 to 125MHz.
- The frequency writing technology makes quick delivery possible.
- Stand-by function for output.
- Compact and light weight : height 4.7mm, volume 0.4cm<sup>3</sup>, weight 1.5g.
- High reliability.  
(metal hermetic sealed crystal unit is inhoused)
- Applicable for reflow automatic mounting processes.
- Static electricity proof packaging : tape & reel.

■ Absolute Maximum Rating  
 Supply Voltage (V<sub>DD</sub>) -0.5~+7.0V DC  
 Storage Temperature Range -55~+125°C

Item	Model	1880VE	1880WE
Output Level		TTL	
Frequency Range	(MHz)	1~125	
Frequency Stability	(×10 <sup>-6</sup> )	±50, ±100	
Operating Temp. Range	(°C)	-20~+70	
Supply Voltage	(V)	5.0±10%	
Current Consumption (+5V, at 25°C)		45mA (max)	
	stand-by	30mA (max)	50µA (max)
V <sub>OL</sub> max / V <sub>OH</sub> min	(V)	0.4/V <sub>DD</sub> -0.4 I <sub>OL</sub> =8mA, I <sub>OH</sub> =-8mA	
Tr max/Tf max	(ns)	4/4 (at 0.4V~2.4V)	
Duty Cycle	(%)	45~55 (≤66.7MHz), 40~60(>66.7MHz): at 1.4V	
Fanout (gate)	TTL GATE	5	
Stand-by Function		Yes (tri-state)	
Jitter	P-P (ps)	250 max (<33MHz), 200 max (≥33MHz): at C <sub>L</sub> =15pF	

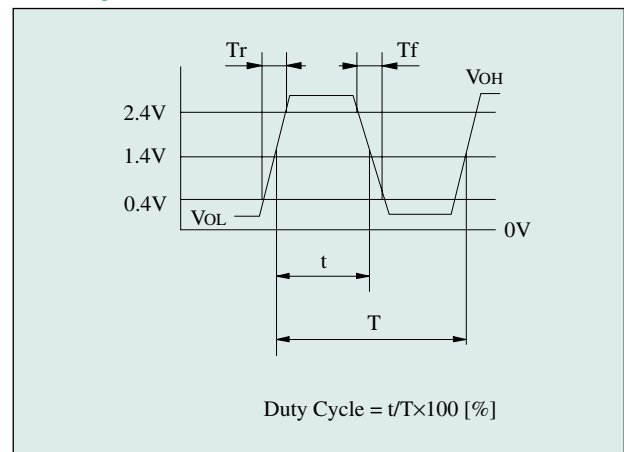
Note : If requested, Operating Temp. Range -40~+85°C (Frequency 40MHz/Frequency Stability ±100×10<sup>-6</sup>) is available.

#### ■ 1880VE • 1880WE Series Outline



PIN	Connection
# 1	STAND-BY
# 2	GND
# 3	OUTPUT
# 4	+5VDC

#### ■ Output Wave <TTL>



#### ■ Stand-by Function

# 1 pin input	# 3 pin output
H level (+2.0 Vmin) or open	Operating
L level (+0.8 Vmax)	High impedance (Weak pull down)