DSO221SW TYPE SPXO PRELIMINARY SPECIFICATION

1. Device Name SPXO
2. Type DSO221SW
3. Frequency 24.000MHz
4. Absolute Maximum Value

	Item	Symbol	Rating	unit
1	Supply Voltage	V_{cc}	-0.6 ~ +4.5	V
2	Storage Temperature Range	T_{stg}	-40 ~ +85	°C

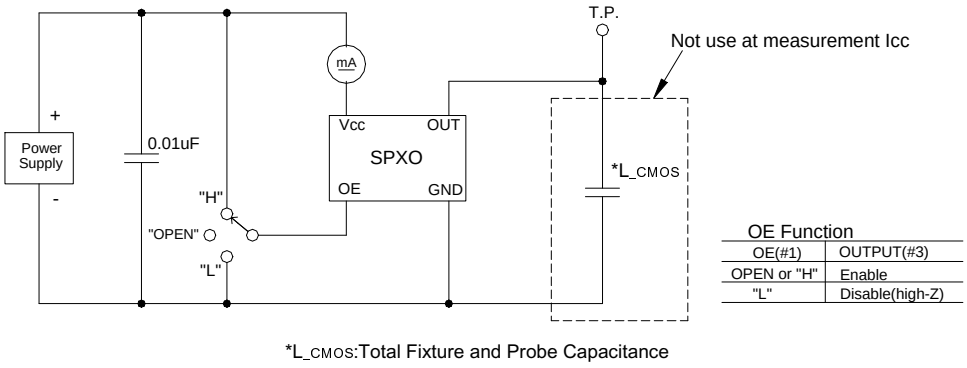
5. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	unit
1	Supply Voltage	V_{cc}	+3.0	+3.3	+3.6	V
2	Operating Temperature Range	T_{opr}	-40	-	+85	°C
3	Output Load	L_{-CMOS}	-	-	15	pF

6. Electrical Characteristics

(T_a=+25°C, V_{cc} =+3.3V unless otherwise noted)

	Item	Symbol	Test Conditions	Limits			unit
				min.	typ.	max.	
1	Frequency Stability	f_{tol}	V_{cc}=+3.3V±0.3V T_a=-40 ~ +85 °C	-15	-	+15	ppm
2	Supply Current	I_{cc}	at No Load,#1pin:"H" or open	-	-	3.2	mA
	Standby Current	I_{-std}	#1pin:"L"	-	-	0.01	mA
3	Output Character						
	3-1.Symmetry	SYM	0.5V_{CC} level	45	50	55	%
	3-2.Rise Time	t_r	0.1V_{CC} ~ 0.9V_{CC}	-	-	6	ns
	3-3.Fall Time	t_f	0.9V_{CC} ~ 0.1V_{CC}	-	-	6	ns
	3-4.Low Level	V_{OL}		-	-	V_{cc}x0.1	V
	3-5.High Level	V_{OH}		V_{cc}x0.9	-	-	V
	3-6.Output Load	L_{-CMOS}		-	-	15	pF
4	Input OE						
	4-1.Output enable time	t_{pzl}		-	-	2	ms
	4-2.Output disable time	t_{plz}		-	-	200	ns
	4-3.Enable input	V_{IH}		V_{cc}x0.8	-	-	V
	4-4.Disable input	V_{IL}		-	-	V_{cc}x0.2	V



*L_{CMOS}:Total Fixture and Probe Capacitance

Fig1. Measurement Circuits

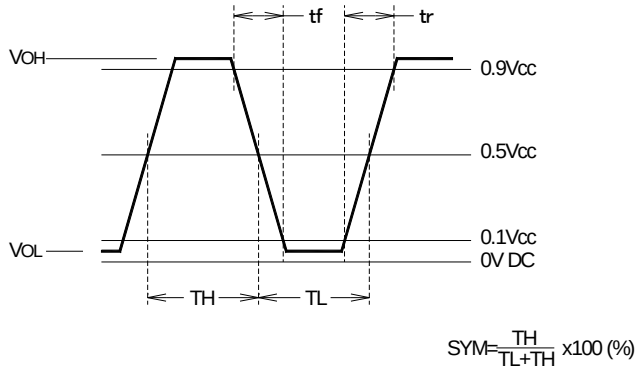


Fig2. Output Waveform

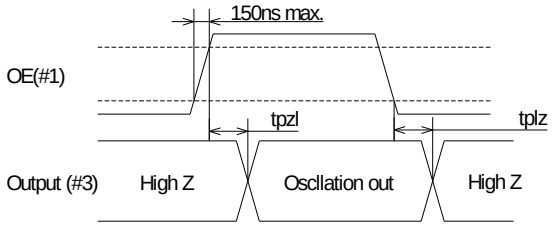
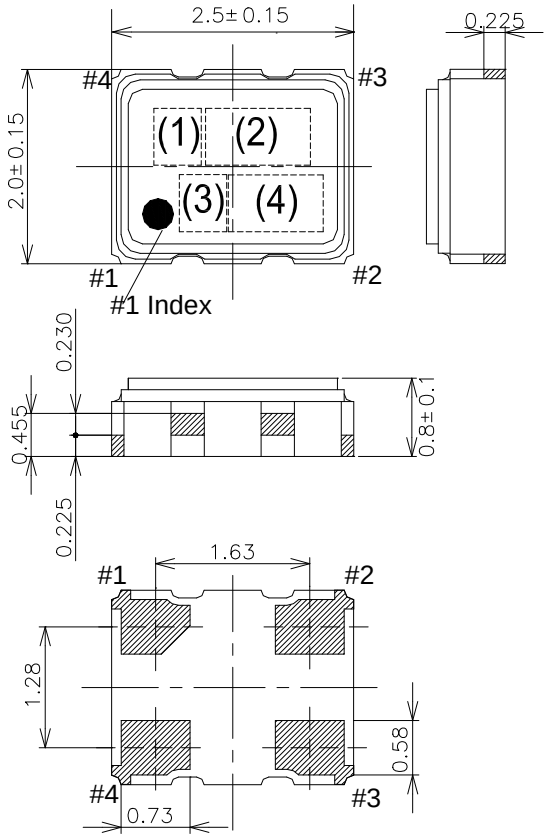


Fig3. Input output condition

7. Outline, Pin Connections

Outline



Pin Connections

Pin No.	Connection
#1	OE
#2	GND
#3	OUTPUT
#4	Vcc

Marking

(1)Model Code W
(2)Frequency 24.0(MHz, 4digits)
(3)Logo D
(4)Lot No. Year(1digit)+Week(2digits)
e.g. 2016/01/01 -> 601

unit: mm
Dimensional Tolerance: ±0.15
(Unless otherwise noted)

Land pattern layout(Example)