

1. Device Name SPXO
2. Model Name DSO211SXF
3. Nominal Frequency 27.000 MHz
4. Reliability AEC-Q200 Compliant
5. Absolute Maximum Ratings

	Item	Symbol	Rating	Unit
1	Supply Voltage	V_{CC}	-0.3 ~ +4.5	V
2	Storage Temperature Range	T_{stg}	-40 ~ +125	°C

6. Recommended Operating Conditions

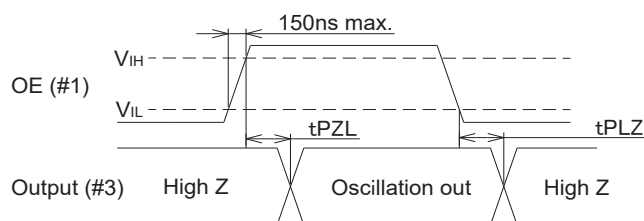
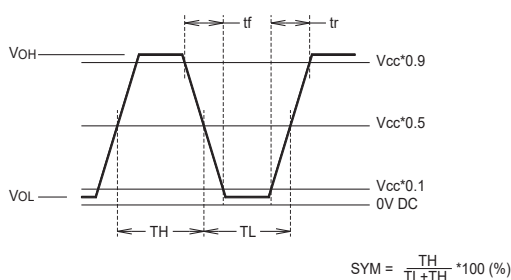
	Item	Symbol	min.	typ.	max.	Unit
1	Supply Voltage	V_{CC}	+1.6	+1.8	+2.25	V
			+2.25	+2.5	+2.75	V
			+2.6	+2.8	+3.0	V
			+3.0	+3.3	+3.6	V
2	Output Load	L_{CMOS}	-	-	15	pF
3	Operating Temperature Range	T_{use}	-40	-	+125	°C

7. Electrical Characteristics ($T_a=+25^{\circ}\text{C}$, $V_{CC}=+1.8\text{V}\sim+3.3\text{V}$, $L_{CMOS}=15\text{ pF}$, unless otherwise noted)

	Item	Symbol	Condition	Limits			Unit	Notes
				min.	typ.	max.		
1	Frequency Tolerance	f_{tol}	$V_{CC}=+1.8+1.8/-0.2\text{V}$, $T_a=-40\sim+125^{\circ}\text{C}$	-50	-	+50	ppm	1,2
2	Current Consumption	I_{CC}	At No Load	$V_{CC}=+1.8\text{V}$	-	-	1.7	mA
				$V_{CC}=+2.5\text{V}$	-	-	2	mA
				$V_{CC}=+2.8\text{V}$	-	-	2.2	mA
				$V_{CC}=+3.3\text{V}$	-	-	2.4	mA
3	Stand-by Current	I_{std}	#1 pin "L" Level	-	-	10	μA	
4	Output Characteristics							
	1.Symmetry	SYM	$V_{CC}\times 0.5$ Level	45	-	55	%	
	2.Rise Time / Fall Time	t_r / t_f	$V_{CC}\times 0.1 \sim V_{CC}\times 0.9$ Level	$V_{CC}=+1.8\text{V}$	-	-	5	ns
				$V_{CC}=+2.5\text{V}$, $+2.8\text{V}, +3.3\text{V}$	-	-	3	ns
	3.0 Level Voltage	V_{OL}		-	-	$V_{CC}\times 0.1$	V	
5	4.1 Level Voltage	V_{OH}		$V_{CC}\times 0.9$	-	-	V	
	Input OE							
	1.Output Enable Time	t_{PZL}		-	-	2	ms	
	2.Output Disable Time	t_{PLZ}		-	-	200	ns	
	3.0 Level Input Voltage	V_{IL}		-	-	$V_{CC}\times 0.3$	V	
	4.1 Level Input Voltage	V_{IH}		$V_{CC}\times 0.7$	-	-	V	

Notes

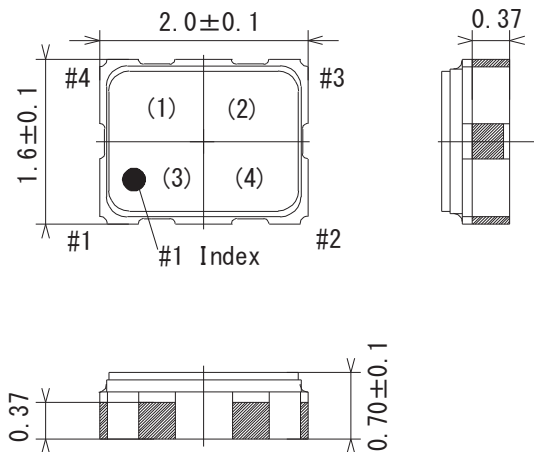
1. Ref. to nominal Frequency
2. Please leave after reflow in 8h or more at room ambient.



TITLE	REMARK		
DSO211SXF TYPE SPECIFICATION	P2025-3212		
DATE	SPEC. No.	REV.	PAGE
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8. Outline, Pin Connections

Outline



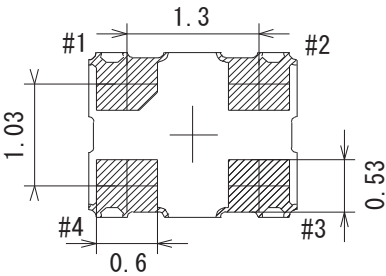
Pin Connections

Pin No.	Connection
#1	O.E.(Output Enable)
#2	GND
#3	Output
#4	Vcc

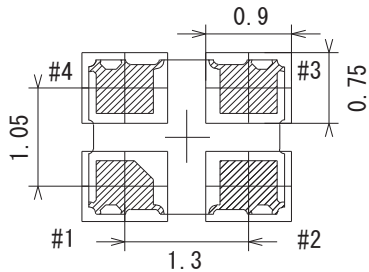
Marking

(1) Model code	XF
(2) Frequency	27.0
(3) Logo	D
(4) Lot No.	Year (1digit) +Week (2digits) e.g.2025/1/1 → 501

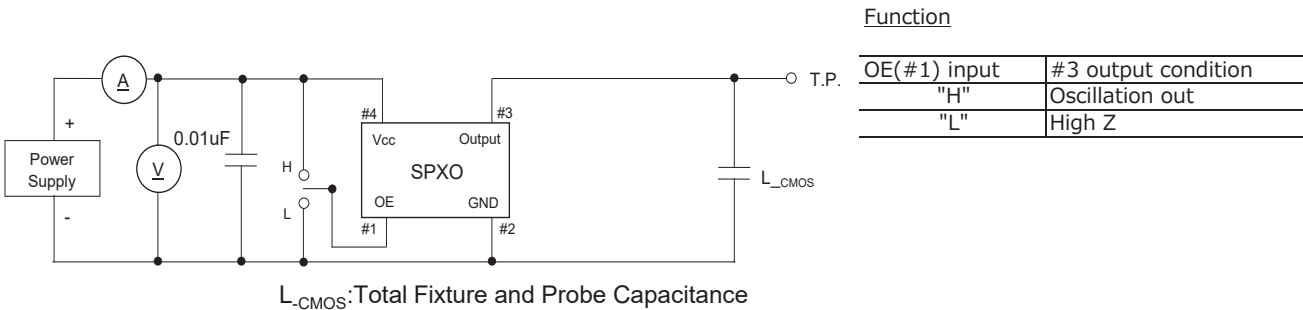
unit: mm
Dimensional Tolerance: ±0.1
(Unless otherwise noted)



Land pattern layout (Example)



9. Measurement Circuit



Function

OE(#1) input	#3 output condition
"H"	Oscillation out
"L"	High Z

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