

1. Device Name TCXO
2. Model Name DSB211SDN
3. Nominal Frequency 52 MHz
4. Mass 0.015 g max.

5. Absolute Maximum Ratings

	Item	Symbol	Rating	unit
1	Supply Voltage	V_{CC}	-0.3 ~ +4.6	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}	+3.135	+3.3	+3.465	V
2	Load Impedance (resistance part) (parallel capacitance)	L_{OAD_R}	9	10	11	kΩ
		L_{OAD_C}	9	10	11	pF
3	Operating Temperature Range	T_{use}	-40	-	+85	°C

7. Electrical Characteristics

($T_A = -40 \sim +85$ °C, $L_{OAD_R}/C = 10$ kΩ// 10 pF, $V_{CC} = +3.3$ V unless otherwise noted)

	Item	Condition	Limits			unit	Notes
			min.	typ.	max.		
1	Current Consumption		-	-	+2	mA	
2	Output Level		0.8	-	-	V_{P-P}	1
3	Symmetry	GND level (DC cut)	40/60	-	60/40	%	
4	Frequency Stability						
	1.Tolerance	After 2 times reflow Ref. to nominal frequency	-1.5	-	1.5	ppm	2,3
	2.vs Temperature	$T_A = -40 \sim +85$ °C Ref. to Frequency($T_A = +25$ °C)	-0.5	-	0.5	ppm	
	3.vs Supply Voltage	$V_{CC} = +3.3$ V $\pm 5\%$	-0.2	-	0.2	ppm	
	4.vs Load Variation	$L_{OAD_R}/C = (10k\Omega//10pF) \pm 10\%$	-0.2	-	0.2	ppm	
	5.vs Aging	$T_A =$ Room ambient	-1	-	1	ppm/1year	
5	Start Up Time	@90% of final V_{OUT} level	-	-	2	ms	
6	SSB Phase Noise	Relative to f0 level offset 1k Hz	-	-	-125	dBc/Hz	

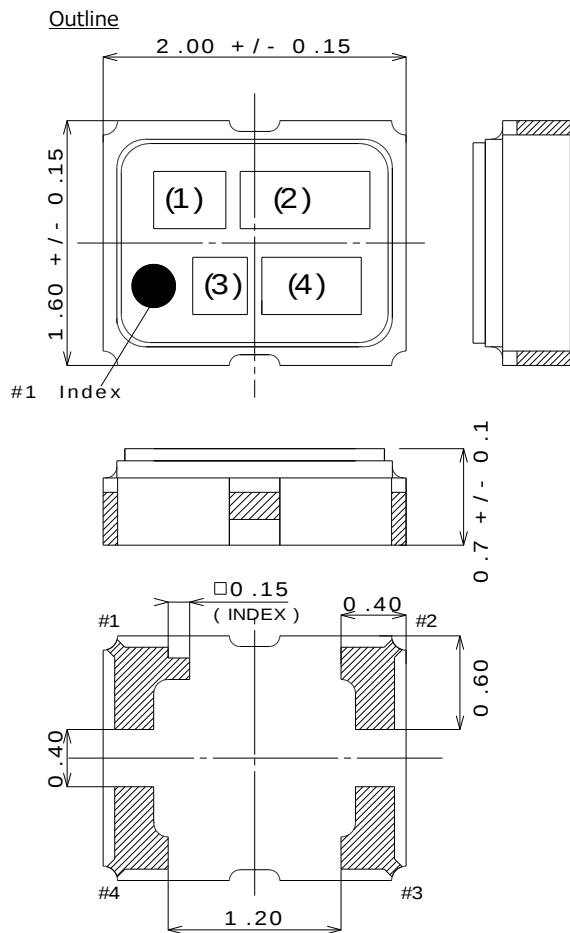
Notes

- 1.Clipped sine wave (DC-coupled)
2. $T_A = +25$ °C
3. Please leave after reflow in 2h or more at room ambient.

AEC-Q200 Compliant

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8. Outline, Pin Connections



Pin Connections

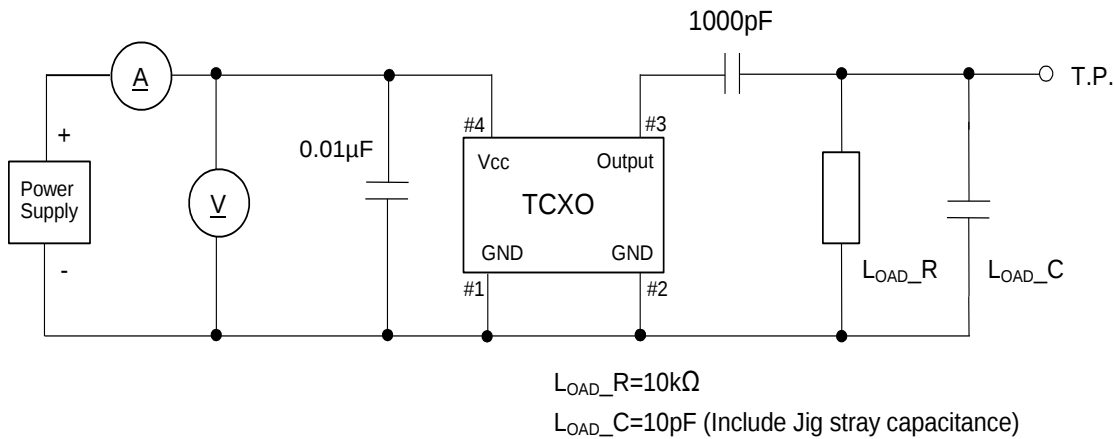
Pin No.	Connection
#1	GND
#2	GND
#3	Output
#4	V _{CC}

Marking

- (1) Model code BN
(2) Frequency 52.0 (MHz, 3digits)
(3) Logo D
(4) Date code Year (1digit) + Week (2digits)
e.g. 2025/1/1 → 501

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

9. Measurement Circuit



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