1. Device Name TCXO
2. Model Name DSB211SDN
3. Nominal Frequency 50 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 ~ +85	℃

6. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	unit
1	Supply Voltage	V_{CC}	+2.85	+3.0	+3.15	V
2	Load Impedance (resistance part)	$L_{OAD_}R$	9	10	11	kΩ
	(parallel capacitance)	$L_{OAD_}C$	9	10	11	pF
3	Operating Temperature Range	T_use	-40	-	+85	℃

7. Electrical Characteristics

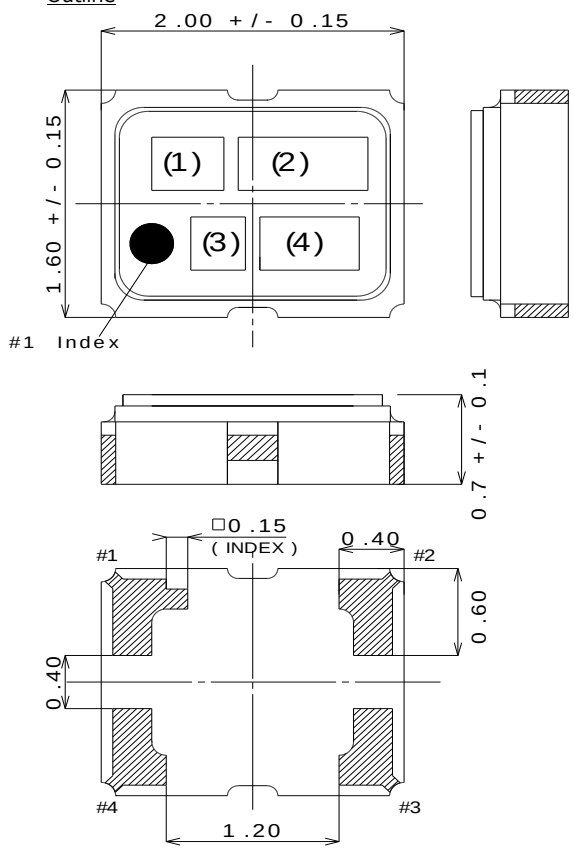
(T_A= -40 ~ +85 ℃, $L_{OAD_}$R//C= 10 kΩ// 10 pF,Vcc= +3.0 V unless otherwise noted)

	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	Ta=-40~+85℃ Ref. to Frequency(T_A=+25℃)	-0.5	-	0.5	ppm	
	3.vs Supply Voltage	Vcc = +3.0 V ±5%	-0.2	-	0.2	ppm	
	4.vs Load Variation	LOAD_R//C=(10kΩ//10pF)±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.

8. Outline, Pin Connections

Outline



Pin Connections

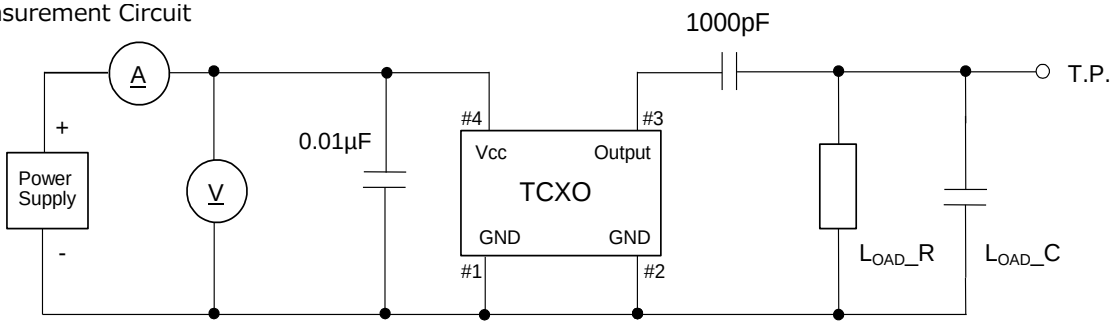
Pin No.	Connection
#1	GND
#2	GND
#3	Output
#4	V_{CC}

Marking

(1) Model code BN
(2) Frequency 50.0 (MHz,3digits)
(3) Logo D
(4) Date code Year (1digit) +Week (2digits)
e.g.2024/1/1 → 401

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

9. Measurement Circuit



L_{OAD}_R=10kΩ
L_{OAD}_C=10pF (Include Jig stray capacitance)

TITLE	REMARK		
DSB211SDN TYPE SPECIFICATION	P2024-3265		
DATE	SPEC. No.	REV.	PAGE
2024/12/3	7EF05000A0N		2 / 2