1. Device Name TCXO
2. Model Name DSB321SDA
3. Nominal Frequency 19.200 MHz
4. Mass 0.03g max.

5. Absolute Maximum Ratings

	Item	Symbol	Rating	unit
1	Supply Voltage	V_{CC}	-0.3 ~ +6.0	V
2	Storage Temperature Range	$T_{_STG}$	-40 ~ +85	°C

6. Recommended Operating Conditions

	Item	Symbol	min.	typ.	max.	unit
1	Supply Voltage	V_{CC}	+1.7	+3.3	+3.6	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	$T_{_OPR}$	-40	-	+85	°C

7. Electrical Characteristics

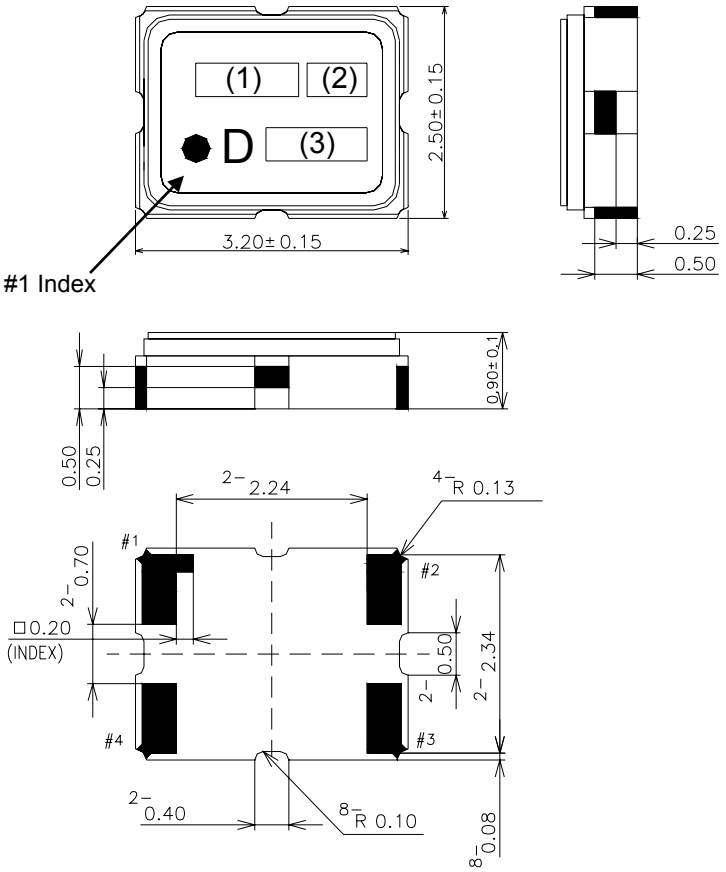
(T_A=-40~+85C, L_{OAD}_R//C=10kΩ//10pF, V_{CC}=+3.3V, unless otherwise noted)

	Item	Conditions	Limits			unit	Notes
			min.	typ	max.		
1	Current Consumption		-	-	+1.5	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	ppm	2,3
	2.vs Temperature	T_A=-40~+85°C Ref. to Frequency (T_A=+25°C)	-	-	±1.0	ppm	
	3.vs Supply Voltage	V_{CC}=+3.3V+0.3V/-1.6V	-	-	±0.3	ppm	
	4.vs Load Variation	L_{OAD}_R//C=(10kΩ//10pF)±10%	-	-	±0.2	ppm	
	5.vs Aging	T_A=Room ambient	-	-	±1.0	ppm/year	
5	Start Up Time	@90% of final Vout level	-	-	2.0	ms	
6	SSB Phase Noise	Relative to f0 level offset 100Hz	-	-	-110	dBc/Hz	
		Relative to f0 level offset 1kHz	-	-	-130	dBc/Hz	
		Relative to f0 level offset 10kHz	-	-	-140	dBc/Hz	

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

8. Outline, Pin Connections

Outline



Pin Connections

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

Marking

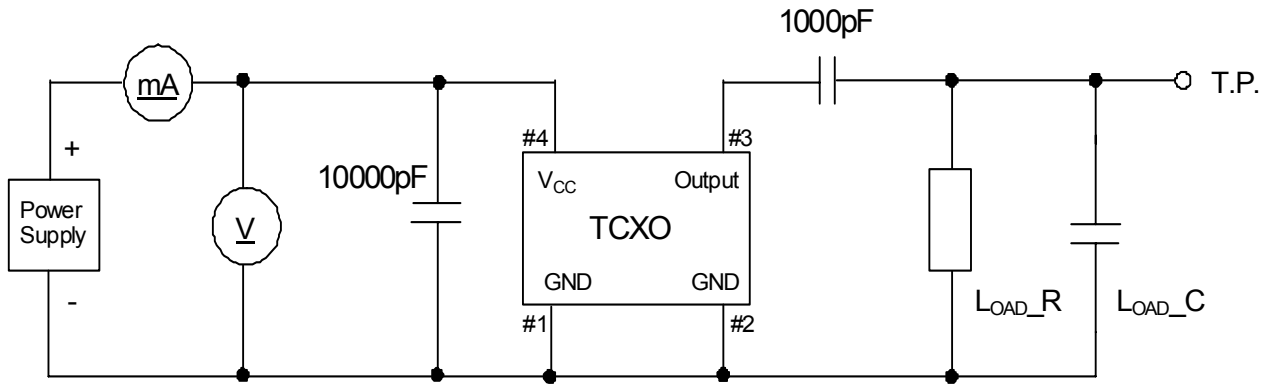
(1) Frequency	19.20 (MHz, 4digits)
(2) Model code	T
(3) Date code	Year (1digit) +Week (2digits)
	e.g.2011/01/01→ 101

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		
DSB321SDA TYPE SPECIFICATION			
Date	Spec. No.	Rev.	Page
2011/09/14	ZH04728	-	2/2