

1. Device Name TCXO
2. Model Name DSB321SDN
3. Nominal Frequency 30.720 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} | +3.15 | +3.3 | +3.45 | V |
| 2 | Load Impedance (resistance part) (parallel capacitance) | L _{LOAD_R} | 9 | 10 | 11 | kΩ |
| | | L _{LOAD_C} | 9 | 10 | 11 | pF |
| 3 | Operable Temperature Range | T _{OPR} | -30 | - | +85 | °C |

7. Electrical Characteristics

(T_A=-30 ~ +85 °C, 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 | Harmonics | | - | - | -5 | dBc | |
| 5 | Frequency Stability | | | | | | |
| | 1.Tolerance | After 2 times reflow Ref. to Nominal Frequency | - | - | ±1.5 | ppm | 2 |
| | 2.vs Temperature | T _A =-30 ~ +85 °C Ref. to Frequency(T _A =+25°C) | - | - | ±0.5 | ppm | |
| | 3.vs Supply Voltage | V _{CC} =+3.3V±5% | - | - | ±0.2 | 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 | |
| 6 | Start Up | @90% of final V _{out} level | - | - | 2.0 | ms | |
| 7 | SSB Phase Noise | Relative to F0 level offset 1kHz | - | - | -130 | dBc/Hz | |

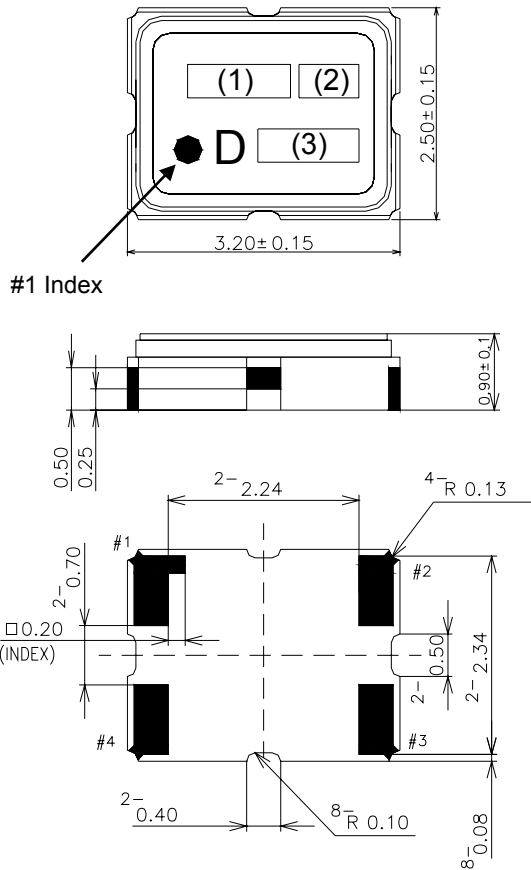
Notes

1. Clipped sine wave (DC-coupled)
2. Please leave after reflow in 2-hour or more at room ambient.

| | | | | |
|---------------------------------------|---------------------------|-----------|--------------|--|
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8. Outline, Pin Connections

Outline



Pin Connections

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

Marking

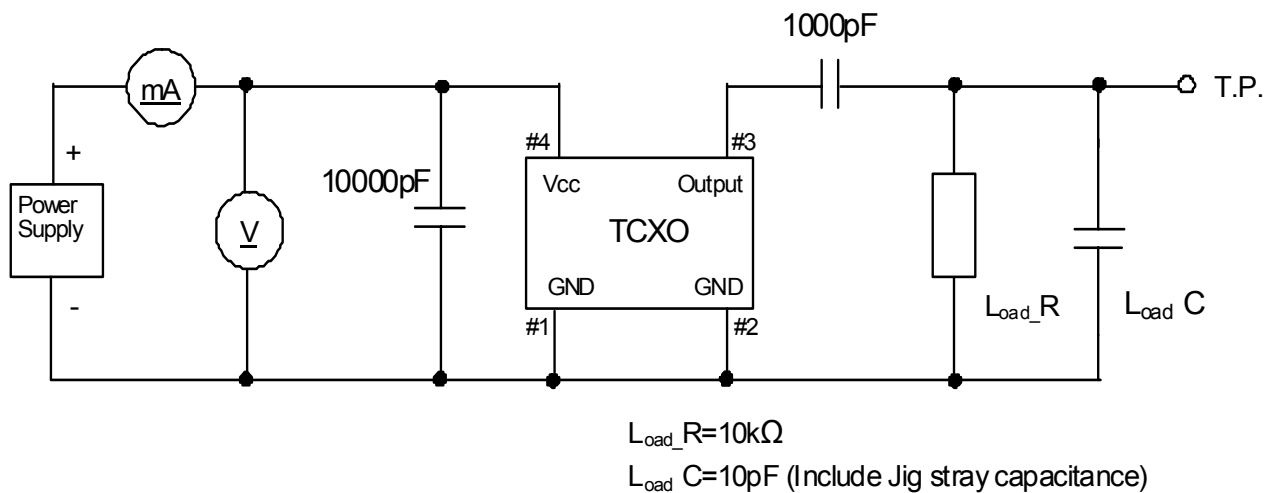
- (1) Frequency 30.72 (MHz, 4digits)
 (2) Model code BN
 (3) EIA Date code Year(1digit)+Week(2digits)
 e.g. 2019/1/1 → 901

unit : mm

Dimensional Tolerance: ±0.15

(Unless otherwise noted)

9. Measurement Circuit



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Remark

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