

**Customer Code:** \_\_\_\_\_

# DATASHEET

**DAPU P/N:**      **T2016C-B5A9CD-24.00MHz-X337**

| <b>DAPU</b>     |                |                 | <b>Customer Approval</b> |
|-----------------|----------------|-----------------|--------------------------|
| Drew            | Audited        | Approved        |                          |
| Jieshu<br>ZHENG | Jianhua<br>LIN | Gangtao<br>FENG |                          |
| Date:           | 2025/1/2       |                 |                          |
|                 |                |                 | Stamp, please! Thanks!   |

## **Guangdong Dapu Telecom Technology Co.,Ltd**

Bldg 5, SSL Modern Enterprise Accelerator Zone, Dongguan City, Guangdong Province, PRC China  
TEL: 0086-0769-88010888      FAX: 0086-0769-81800098

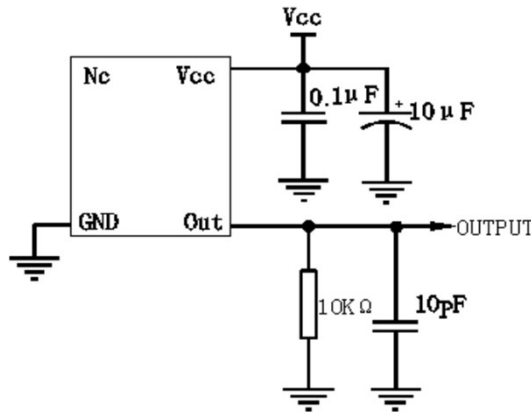


## 1、Electrical Parameter

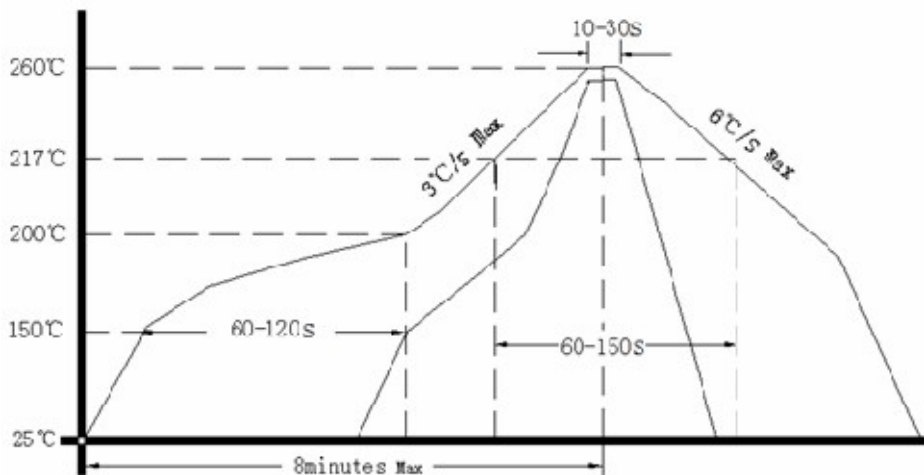
| MODEL:                |                        | T2016C-B5A9CD-24.00MHz-X337 |      |      |                   |  |
|-----------------------|------------------------|-----------------------------|------|------|-------------------|--|
| No.                   | Description            | Parameters                  |      |      | Units             | Test Condition   |
|                       |                        | Min.                        | Typ. | Max. |                   |  |
| Output                | Frequency              | 24.000                      |      |      | MHz               |  |
|                       | Output Waveform        | Clipped Sine Wave           |      |      | -                 |  |
|                       | Vp-p                   | 0.8                         |      |      | V                 |  |
|                       | Spurious Suppression   |                             |      | -8   | dBc               |  |
|                       | Load                   | 10KΩ//10pF                  |      |      |                   |  |
| Frequency Stabilities | Frequency Tolerance    | -1.5                        |      | 1.5  | ×10 <sup>-6</sup> | @25±2°C, 2H, after 2 times reflow soldering, base on nominal frequency.  |
|                       | vs. Temperature        | -0.5                        |      | 0.5  | ×10 <sup>-6</sup> | T <sub>A</sub> varied from -40°C to 85°C, measurement referenced to frequency observed with T <sub>A</sub> =25°C, V <sub>CC</sub> =3.3V, O <sub>load</sub> =10KΩ//10pF, temperature variable speed less than 2°C per minute. |
|                       | vs. Supply Voltage     | -0.1                        |      | 0.1  | ×10 <sup>-6</sup> | measurement referenced to frequency observed T <sub>A</sub> =25°C, V <sub>cc</sub> =3.3V±10%, and O <sub>Load</sub> =10KΩ//10pF.   |
|                       | vs. Load               | -0.1                        |      | 0.1  | ×10 <sup>-6</sup> | 10% load change measurement referenced to frequency observed with T <sub>A</sub> =25°C, V <sub>cc</sub> =3.3V, and O <sub>Load</sub> =10KΩ//10pF.  |
|                       | Aging Tolerance 1 Year | -1                          |      | 1    | ×10 <sup>-6</sup> | T <sub>A</sub> =25°C, V <sub>cc</sub> =3.3V, and after 1h of operation.  |
| Power Supply          | Current consumption    |                             |      | 2    | mA                | @25°C, V <sub>cc</sub> =3.3V, O <sub>Load</sub> =10KΩ//10pF.   |
|                       | Start up Time          |                             |      | 2    | ms                | More than 90% of final output voltage  |
|                       | Supply Voltage         | 1.71                        | 3.30 | 3.63 | V                 |  |
| SSB Phase Noise       | Phase Noise@25±2°C     |                             |      | -50  | dBc/Hz            | 1Hz  |
|                       |                        |                             |      | -85  |                   | 10Hz   |
|                       |                        |                             |      | -113 |                   | 100Hz  |
|                       |                        |                             |      | -135 |                   | 1KHz   |
|                       |                        |                             |      | -146 |                   | 10KHz  |
|                       |                        |                             |      | -153 |                   | 100KHz   |
|                       |                        |                             |      | -155 |                   | 1MHz   |

|                          |  |  |  |     |    |  |
|--------------------------|--|--|--|-----|----|--|
| Environmental Conditions | Operable Temperature   | -40  |  | 85  | °C |  |
|                          | Storage Temperature  | -55  |  | 105 | °C |  |
|                          | ESD Level  | Human Body Model, class 2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.  |  |     |    |  |
|                          |  | Machine Model, class B: 200V; JEDEC JESD22-A115C.  |  |     |    |  |
|                          | Moisture Sensitivity Level   | Level 3.   |  |     |    |  |
|                          | Vibration  | Test Condition: 0.75mm ;acceleration:10g;10Hz~2000Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X ,Y, Z) .IEC 68-2-06 Test Fc. |  |     |    |  |
| Shock                    | 100g; 6ms; half sine wave (3 times for each 3 direction s X ,Y, Z ), IEC 68-2-27 Test Ea/Severity 50A. |  |  |     |    |  |
| Full Package Storage     | Relative humidity (%)  | 20%~70%  |  |     |    |  |
|                          | Temperature (°C)   | -10~35°C   |  |     |    |  |

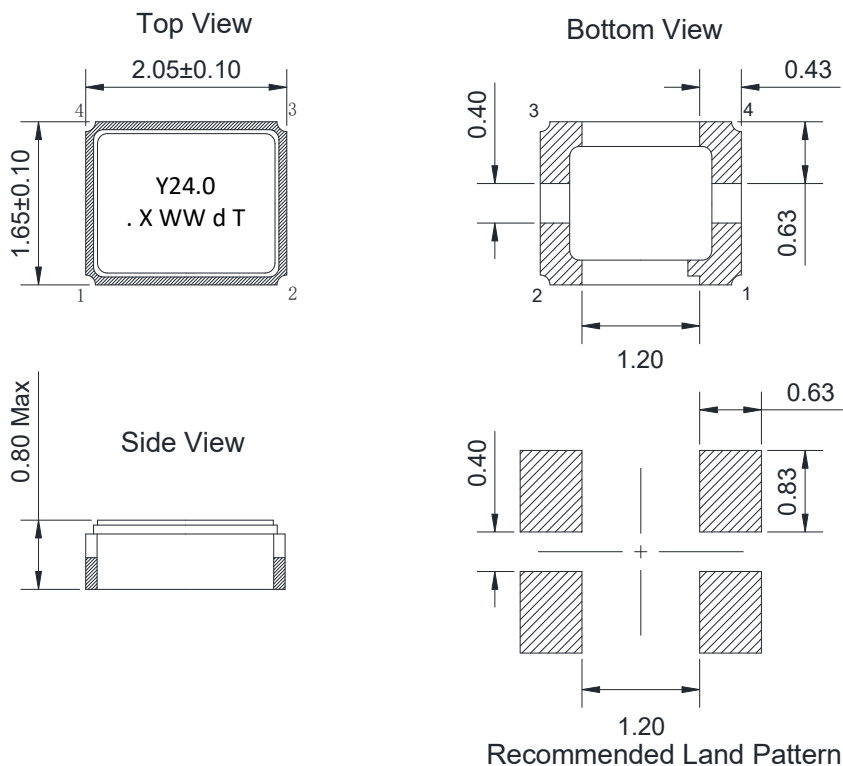
## 2、 Test Circuit



## 3、 Reflow Soldering Curve (RoHS)



#### 4、 Mechanical Structure(mm)



Note: X representative year, WW representative week, others representative Fixed code.

| PIN NAME | CONNECTION                    |
|----------|-------------------------------|
| PIN1     | NC (No electrical connection) |
| PIN2     | GND                           |
| PIN3     | F <sub>OUT</sub>              |
| PIN4     | V <sub>CC</sub>               |