

Customer Code: _____

DATASHEET

DAPU P/N: DPA5325M0000ECB0

| DAPU | | | Customer Approval |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| Jack | David | William | |
| Date: 2023.04.10 | | | |

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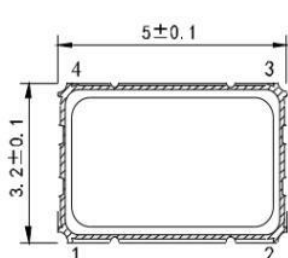
1、 Electrical Parameters

| MODEL: DPA5325M0000ECB0 | | | | | | | |
|-------------------------|--------------------------|--------------------|------------------|------|-------|------------------|---|
| No. | Parameters | SYM. | Electrical Spec. | | | | Notes |
| | | | Min. | Typ. | Max. | Units | |
| 1 | Nominal Frequency | FL | 25.00 | | | MHz | |
| 2 | Oscillation Mode | - | Fundamental | | | | |
| 3 | Frequency Stability | - | -25 | | + 25 | $\times 10^{-6}$ | Includes frequency tolerance@25°C, frequency stability VS.operating temperature range |
| 4 | Operating Temperature | Topr | -40 | ~ | + 85 | °C | |
| 5 | Storage Temperature | Tstg | -55 | ~ | + 125 | °C | |
| 6 | Supply Voltage | V _{DD} | 1.62 | | 3.63 | V | V _{DD} ±10% |
| 7 | Input Current | I _{cc} | | | 10 | mA | |
| 8 | Output waveform | - | CMOS | | | | |
| 9 | Output Load | CL | 15 | | | pF | |
| 10 | Output Voltage High | V _{OH} | 90% | | | V _{DD} | |
| 11 | Output Voltage Low | V _{OL} | | | 10% | V _{DD} | |
| 12 | Rise Time | T _r | | | 5 | ns | 10%-90%V _{DD} Level |
| 13 | Fall Time | T _f | | | 5 | ns | 90%-10%V _{DD} Level |
| 14 | Aging | - | -3 | | + 3 | $\times 10^{-6}$ | First Year at 25°C |
| 15 | Tri-State Output Enable | - | 80% | | | V _{DD} | Pin 1, OE |
| 16 | Tri-State Output Disable | - | | | 20% | V _{DD} | Pin 1, OE |
| 17 | Duty Cycle | - | 40 | ~ | 60 | % | |
| 18 | Start-Up Time | T _{start} | | | 3 | ms | Measured from the time V _{DD} reaches its rated minimum value |

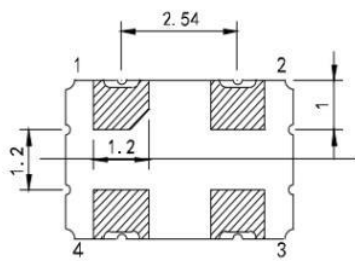


2、 Mechanical Structure

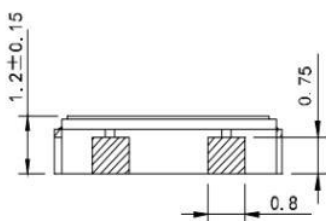
2.1 Dimensions



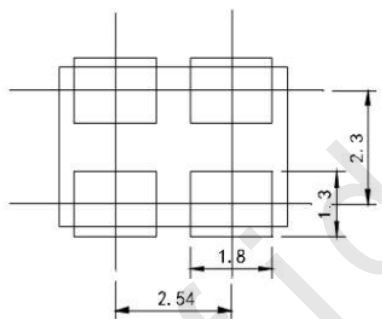
[TOP VIEW]



[BOTTOM VIEW]



[SIDE VIEW]



[Suggested solder pad layout]

| Pin | Function |
|-----|-----------------|
| 1 | Tri-State |
| 2 | GND |
| 3 | Output |
| 4 | V _{DD} |

Unit: mm

2.2 Marking



----- DAPU LOGO

25.000 ----- Frequency

XXYY ----- Manufactured day: XX YY

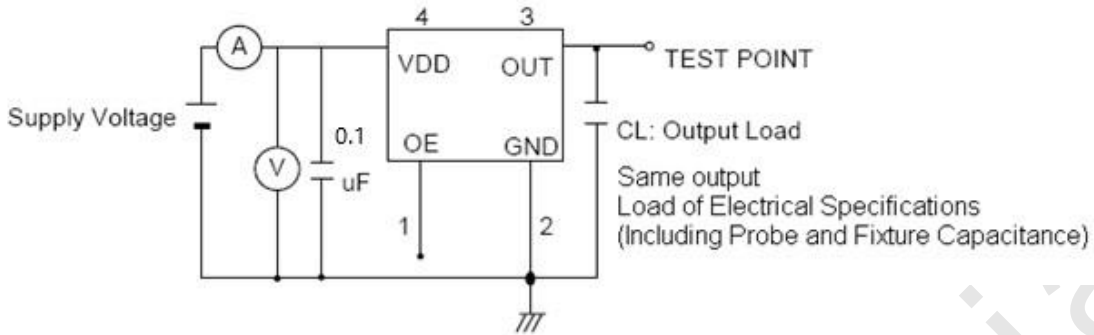
Year Week



----- Pin 1

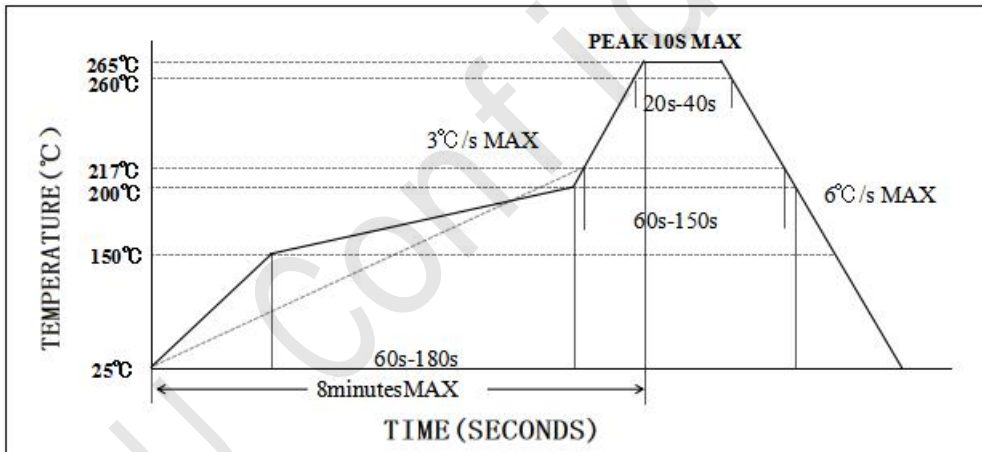


3、 Test Circuit



- Control input (output enable/disable)
- Logic 1 or open on pad 1: Oscillator output
- Logic 0 on pad 1 : Disable output to high impedance

4、 Reflow Soldering Curve (RoHS)

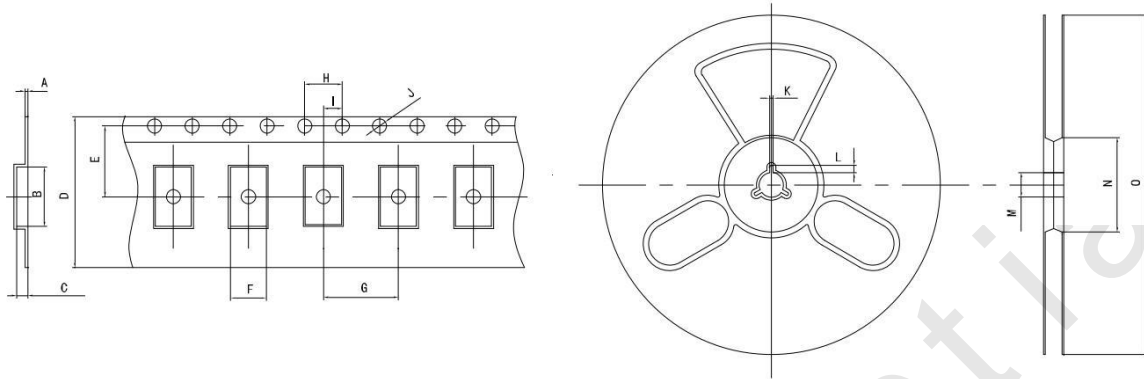


5、 Electro-static Discharges

- HBM: Class3A
- MM: ClassC
- CDM: ClassIV



6、Package: Tape & Reel (mm)



| TEYE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|-----------|------|------|------|-------|------|------|------|------|------|------|------|------|-------|-------|--------|
| 5×3.2 SMD | 0.30 | 7.50 | 1.45 | 12.00 | 5.50 | 3.70 | 8.00 | 4.00 | 2.00 | 1.50 | 2.00 | 4.00 | 13.00 | 60.00 | 180.00 |

7、Reliability Test Specification

| NO. | Test Items | Test Standard | Test Condition | Specifications |
|-----|------------------------------|---------------|---|---|
| 1 | Drop test | GB/T2423.8 | Drop from 150cm height on 3cm hard wooden board for 3 times | Electrical performance meets specification requirements |
| 2 | Mechanical shock | GB/T2423.5 | Peak: 100g; Waveform: Half-sine; Velocity Change: 1000m/s ² ; Duration: 0.5ms; 3 times/direction, Direction: +X, -X, +Y, -Y, +Z, -Z. | |
| 3 | Vibration | GB/T2423.10 | Frequency: 10~2000Hz; Vibration:20min, 1.52mm; Direction: X, Y, Z; Duration: 2 hours/direction. | |
| 4 | Solderability | IEC60068-2-58 | Soldering temperature:245°C ± 5°C Immersion time:5 seconds ± 0.5 seconds Flux:Rosin Resin Methanol Solvent (1 : 4) | |
| 5 | Resistance to soldering heat | IEC60068-2-58 | Reflow soldering: Solder temperature 260±5°C, Immersion time:10±1 S | |
| 6 | High temperature storage | GB/T2423.2 | Temperature: 125°C±2°C; Duration: 500±12hours; | |
| 7 | Low | GB/T2423.1 | Temperature: -40°C±2°C; | |



| | | | |
|---|--|-------------|--|
| | temperature storage | | Duration: 500±12hours; |
| 8 | Temperature Shock | GB/T2423.22 | <p>Do 10 cycles at the following temperature</p> <p>The diagram shows a temperature cycle starting at 25 °C. It ramps down to -55 +/- 3 °C (30 min), dwells at 25 °C (10 min. max.), ramps up to +125 +/- 3 °C (30 min), dwells at +125 +/- 3 °C, and then ramps back down to 25 °C (30 min). The entire sequence is labeled as '1 cycle'.</p> |
| 9 | High temperature high humidity storage | GB/T2423.3 | <p>Temperature: 85°C±3°C; Humidity: 85%; Duration: 500hours;</p> |

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