

Customer Code: _____

DATASHEET

DAPU P/N: DPZ7525M0000AB00NA0

| DAPU | | | Customer Approval |
|-----------------|----------------|-----------------|--------------------------|
| Drew | Audited | Approved | |
| Jieshu ZHENG | Jianhua LIN | Gangtao FENG | |
| Date: | 2024/4/9 | | |

Stamp, please! Thanks!

Guangdong Dapu Telecom Technology Co.,Ltd

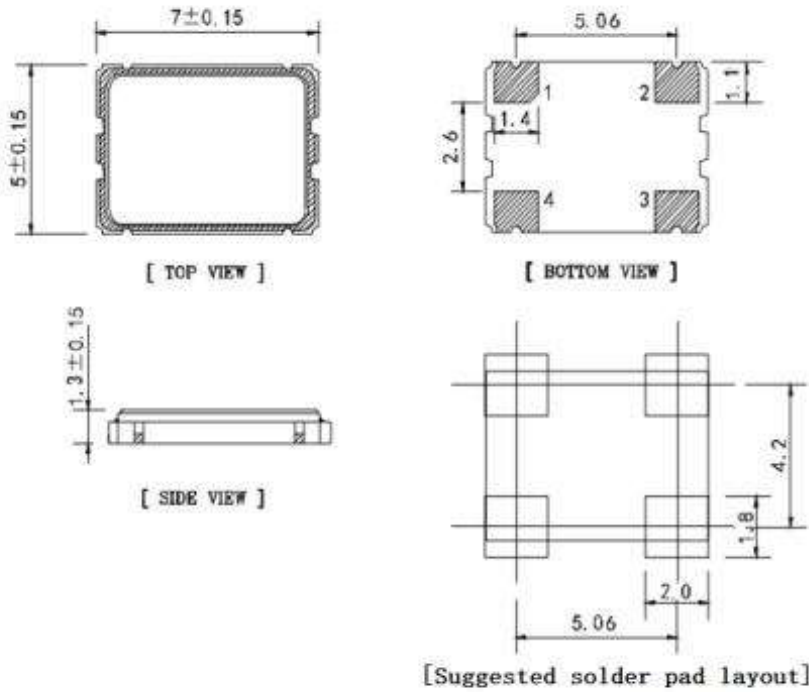
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TEL: 0086-0769-88010888 FAX: 0086-0769-81800098

1、Electrical Parameter

| MODEL : | | DPZ7525M0000AB00NA0 | | | | | |
|---------|--------------------------|---------------------|------------------|------|------|-------|---|
| No. | Parameters | SYM. | Electrical Spec. | | | | Notes |
| | | | Min. | Typ. | Max. | Units | |
| 1 | Nominal Frequency | FL | 25.000 | | | MHz | |
| 2 | Oscillation Mode | - | Fundamental | | | | |
| 3 | Frequency Tolerance | - | -20 | | 20 | ppm | At 25°C |
| 4 | Frequency Stability | - | -30 | | 30 | ppm | -40°C~85°C (Reference 25°C) |
| 5 | Operating Temperature | Topr | -40 | | 85 | °C | |
| 6 | Storage Temperature | Tstg | -55 | | 125 | °C | |
| 7 | Supply Voltage | VDD | 2.97 | 3.3 | 3.63 | V | V _{DD} ±10% |
| 8 | Input Current | Icc | | | 20 | mA | |
| 9 | Output waveform | - | HCMOS | | | | |
| 10 | Output Load | CL | | 15 | | pF | |
| 11 | Output Voltage High | VOH | 0.9 | | | VDD | |
| 12 | Output Voltage Low | VOL | | | 0.1 | VDD | |
| 13 | Rise Time | Tr | | | 5 | ns | 10% -90% V _{DD} Level |
| 14 | Fall Time | Tf | | | 5 | ns | 90% -10% V _{DD} Level |
| 15 | Aging | - | -3 | | 3 | ppm | First Year at 25°C |
| 16 | Tri-State Output Enable | - | 0.7 | | | VDD | Pin 1, OE or ST |
| 17 | Tri-State Output Disable | - | | | 0.3 | VDD | Pin 1, OE or ST |
| 18 | Duty Cycle | - | 40~60 | | | % | |
| 19 | Start-Up Time | Tstart | | | 3 | ms | Measured from the time VDD reaches its rated minimum value. |
| 20 | Phase Jitter(RMS) | | | | - | ps | 12kHz to 20MHz |

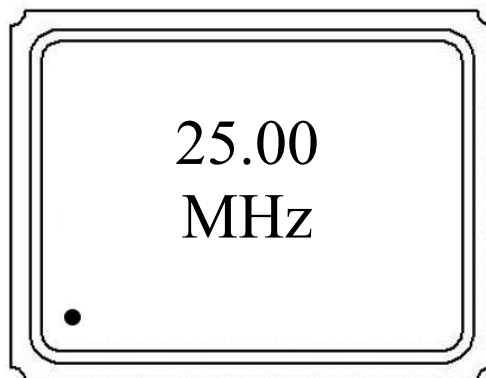
2、 Mechanical Structure

2.1 Dimensions



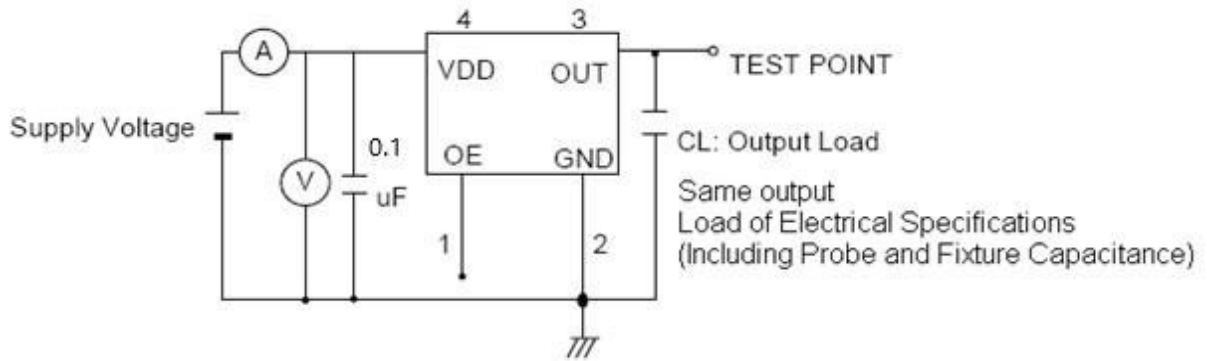
| | |
|------|-----------------|
| PIN1 | Tri-state |
| PIN2 | GND |
| PIN3 | Output |
| PIN4 | V _{DD} |

2.2 Marking



● -----Pin 1

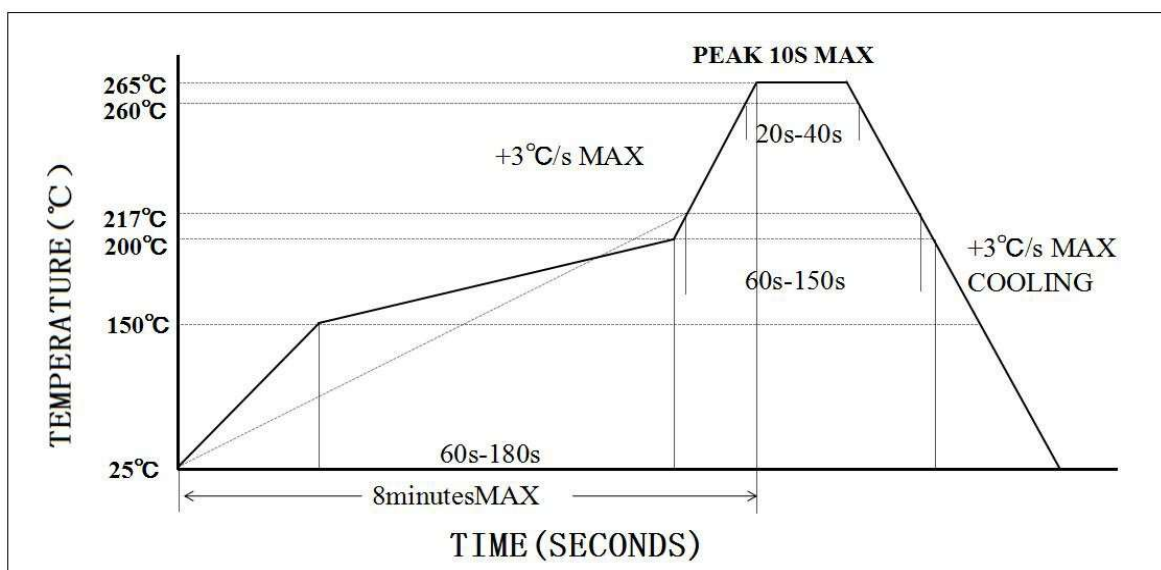
3、 Test Circuit



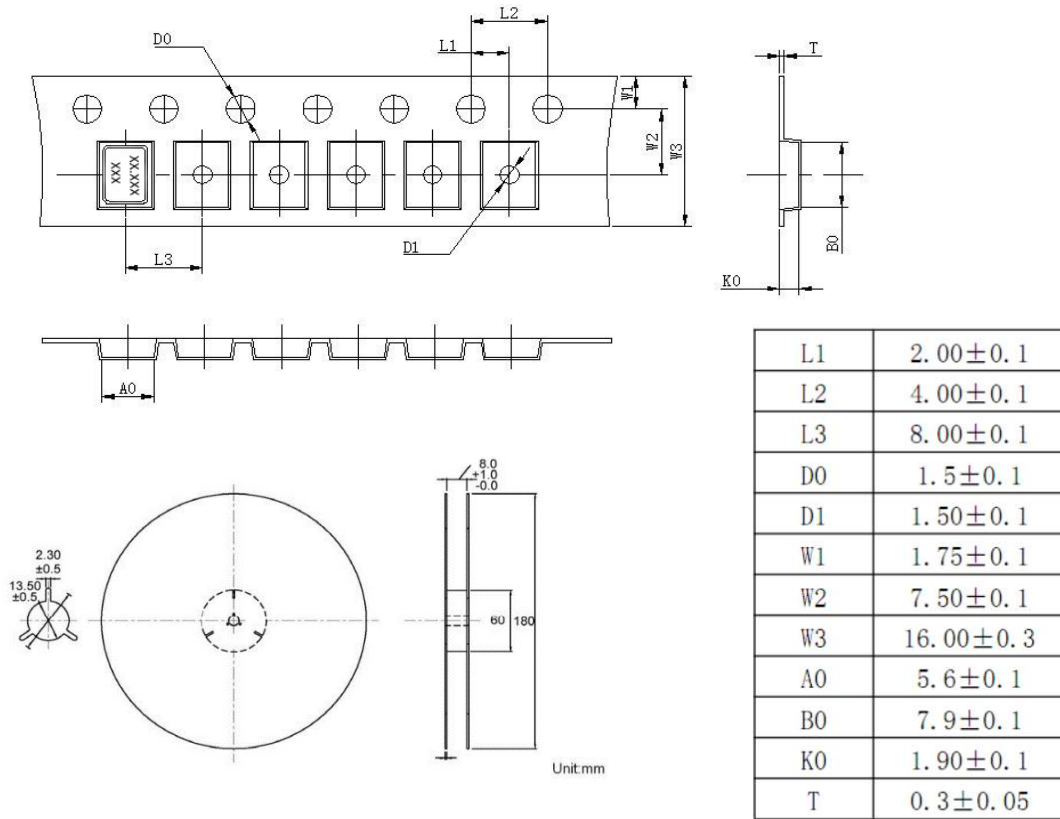
Control input (output enable/disable)

| Tri-State Pin | Output Pin |
|--------------------------|----------------------------------|
| 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、 Package: Tape & Reel (mm)



6、 Reliability Test Specification

| NO. | Test Items | Test Standard | Test Condition | Standard |
|-----|------------------|---------------|---|----------|
| 1 | Drop test | GB/T2423.8 | Drop from 150cm height on 3cm hard wooden board for 3 times | A、 C |
| 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. | A、 C |
| 3 | Vibration | GB/T2423.10 | Frequency: 10~2000Hz; Vibration:20min, 1.52mm; Direction: X, Y, Z; Duration: 2 hours/direction. | A、 C |
| 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) | E |

| NO. | Test Items | Test Standard | Test Condition | Standard |
|-----|--|---------------|--|----------|
| 5 | Resistance to soldering heat | IEC60068-2-58 | Reflow soldering: Solder temperature 260±5°C, Immersion time:10±1S | A、C、D |
| 6 | High temperature storage | GB/T2423.2 | Temperature: 125°C±2°C; Duration: 500±12hours; | A、C、D |
| 7 | Low temperature storage | GB/T2423.1 | Temperature: -40°C±2°C; Duration: 500±12hours; | A、C、D |
| 8 | Temperature Shock | GB/T2423.22 | Do 10 cycles at the following temperature | A、C、D |
| | | | <p>The diagram illustrates a temperature shock cycle. The temperature starts at 25 °C, drops to -55 ± 3 °C, stays there for 30 minutes, then rises to +125 ± 3 °C, stays there for 30 minutes, and returns to 25 °C. The transition times are limited to a maximum of 10 minutes. The entire sequence is labeled as '1 cycle'.</p> | |
| 9 | High temperature high humidity storage | GB/T2423.3 | Temperature: 85°C±3°C; Humidity: 85%; Duration: 500hours; | A、C、D |