

Travelling Merchant: _____

DATASHEET

Standard: DPAM15974401

| Plot | | | The Label |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| | | | |
| Date: 2021.12.17 | | | |

Guangdong Dapu Telecom Technology Co.,Ltd

Building 5, No.24, Industrial East Road, Songshanhu Park, Dongguan, Guangdong, P.R. China

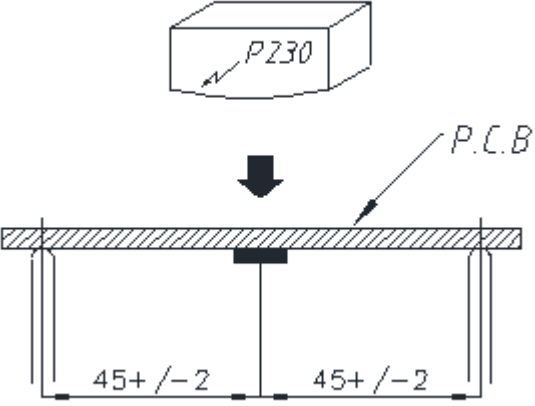
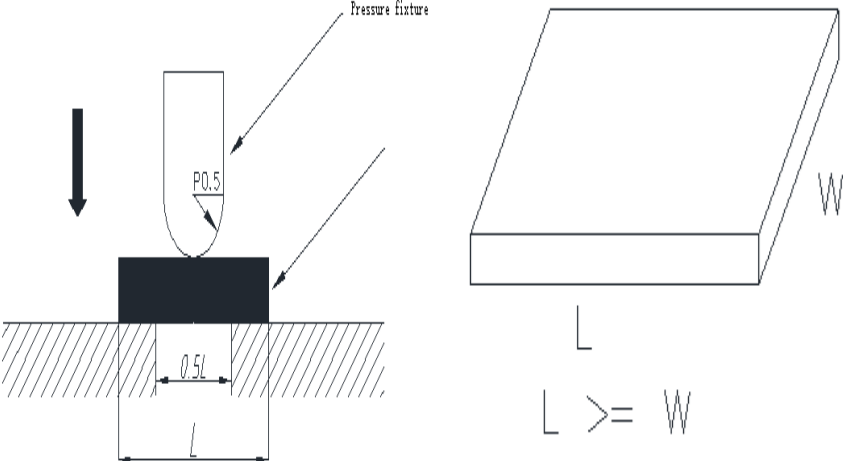
TEL: 0086-0769-88010888 FAX: 0086-0769-81800098



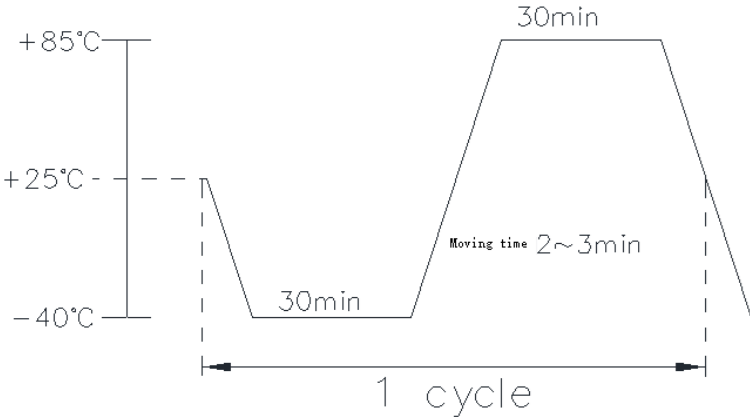
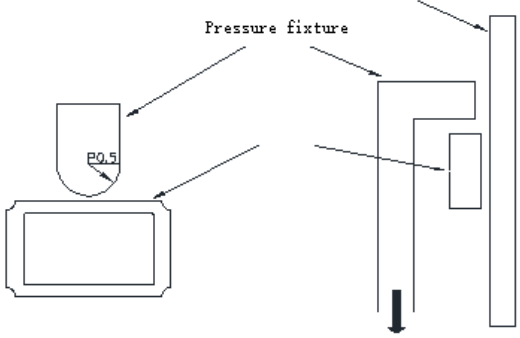
1、 Electrical Parameters

| MODEL: DPAM15974401 | | | | | | | |
|---------------------|----------------------------|--|------------------|------|------|------------------|-----------------------------|
| No. | Parameters | SYM. | Electrical Spec. | | | | Notes |
| | | | Min. | Typ. | Max. | Units | |
| 1 | Nominal Frequency | FL | 15.9744 | | | MHz | |
| 2 | Oscillation Mode | - | Fund | | | - | |
| 3 | Load Capacitance | CL | 8 | | | pF | |
| 4 | Frequency Tolerance | - | -20 | | +20 | $\times 10^{-6}$ | at 25°C |
| 5 | Frequency Stability | - | -30 | | +30 | $\times 10^{-6}$ | @-30°C~85°C |
| 6 | Operating Temperature | - | -30 | ~ | +85 | °C | |
| 7 | Storage Temperature Range | - | -55 | ~ | +125 | °C | |
| 8 | Drive Level | DL | | 10 | 300 | μ W | |
| 9 | Effective Resistance Rr | ESR | - | - | 80 | Ω | |
| 10 | Moisture Sensitivity Level | Level 1 (IPC/JEDEC J-STD-033) | | | | | |
| 11 | Aging | | -1 | - | +1 | $\times 10^{-6}$ | 1 st year, @25°C |
| 12 | Mechanical shock | Peak: 100g; Waveform: Half-sine; Velocity Change: 1000m/s ² ; Duration: 6ms; 3 times/direction, Direction: +X, -X, +Y, -Y, +Z, -Z. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta R_r \leq 15\%$ | | | | | |
| 14 | Drop | Height: 1.5m; 3 times/direction; 6 directions; 150g; Assembled on the resin slab. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta R_r \leq 15\%$ | | | | | |
| 15 | Vibration | Frequency: 10~550~10Hz; Vibration: 12min, 1.5mm; Direction: X, Y, Z; Duration: 2 hours/direction. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta R_r \leq 15\%$ | | | | | |
| 16 | Tightness | Helium pressure helium leak detector detection. $\leq 2.0 \times 10^{-6} \text{Pa.m}^3/\text{s}$ | | | | | |
| 17 | Solder | Temperature: 245°C \pm 10°C; Duration: 2 \pm 0.5seconds. Solder: Sn-3.0 Ag-0.5 Cu. rosin flux Solder Coverage $\geq 95\%$ | | | | | |
| 18 | Heat-resisting (Reflow) | Reflow: 260°C \pm 10°C; Duration: 10 seconds; Reflow 3 times; then room temperature for 24 hours. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta R_r \leq 15\%$ | | | | | |



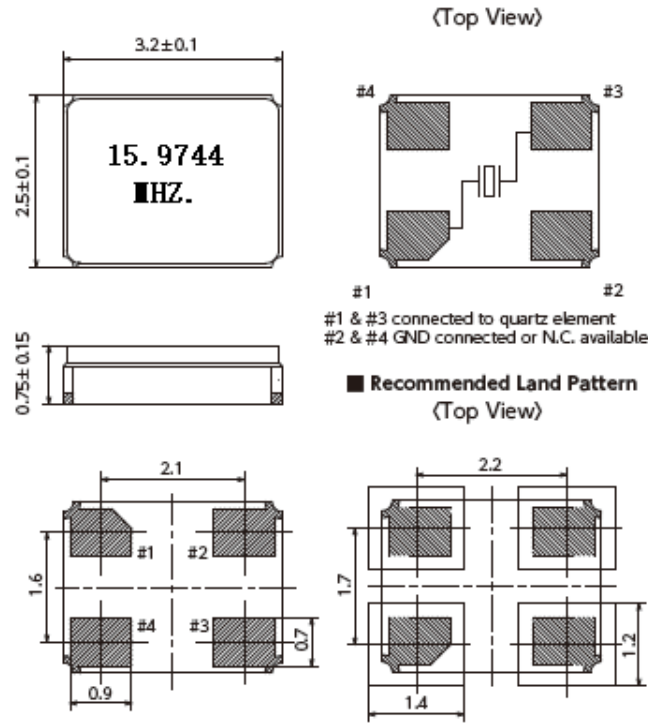
| | | |
|----|--------------------------------|---|
| 19 | Heat-resisting (Hand solder) | Solder: 350°C 10°C/3+1/-0s; One time for each pin; then room temperature for 24 hours. $\Delta f/f \leq \pm 5\text{ppm}, \Delta Rr \leq 15\%$ |
| 20 | Bending | Solder to board, press down, bend 3mm, duration 5±1s. Tightness is good, and $\Delta f/f \leq \pm 5\text{ppm}, \Delta Rr \leq 15\%$  |
| 21 | Strength | Pressure clamp: Hemispheres with a radius of 0.5mm; 10N vertical pressure in the center; Duration: 10±1 seconds. Tightness is good, and $\Delta f/f \leq \pm 5\text{ppm}, \Delta Rr \leq 15\%$  |
| 22 | Low-Temperature storage | Temperature: -40°C ± 2°C; Duration: 1000hours; then room temperature for 2 hours. $\Delta f/f \leq \pm 5\text{ppm}, \Delta Rr \leq 15\%$ |
| 23 | High-Temperature | Temperature: 85°C ± 2°C; Humidity: 90%~95%; Duration: 1000hours; |



| | | |
|----|----------------------------|--|
| 23 | E &High Humidity Storage | then room temperature for 2 hours. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta Rr \leq 15\%$ |
| 24 | High-Temperature E Storage | Temperature: $85^\circ\text{C} \pm 2^\circ\text{C}$; Duration: 1000hours; then room temperature for 2 hours. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta Rr \leq 15\%$ |
| 25 | Temperature Shock | <p>Temperature: $-40 \pm 2^\circ\text{C}/30\text{min} \sim +85 \pm 2^\circ\text{C}/30\text{min}$; 500 cycles, then room temperature for 2 hours. $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta Rr \leq 15\%$</p>  |
| 26 | Fixation | <p>Solder to board, a 10N pressure is applied vertically to the sides of the sample; Duration $10 \pm 1\text{s}$. Tightness is good, nd $\Delta f/f \leq \pm 5\text{ppm}$, $\Delta Rr \leq 15\%$</p>  |

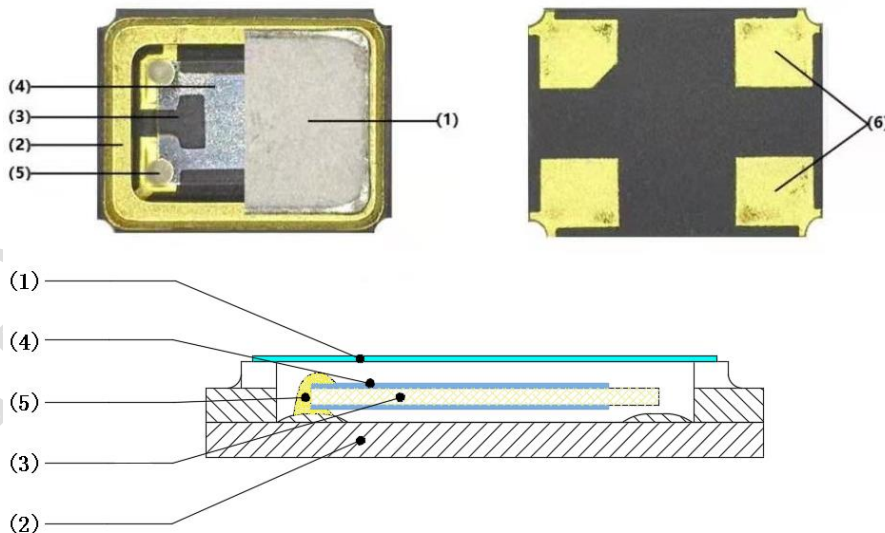


2、Mechanical Structure(mm)



Note: Tolerance $\pm 0.2\text{mm}$

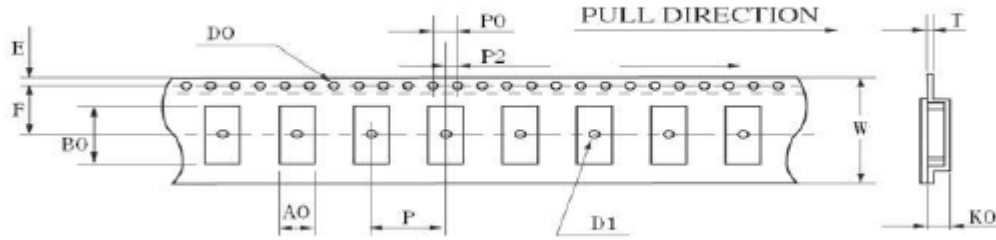
3、Structure



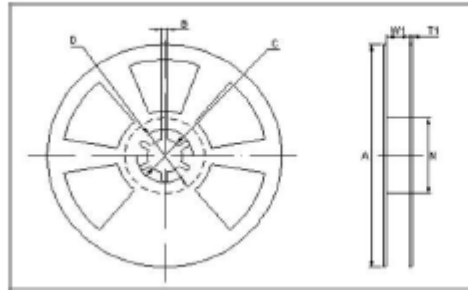
| No. | Name | Material |
|-----|----------------|---------------|
| (1) | Can | Fe-Co-Ni |
| (2) | Base | Ceramic |
| (3) | Blank | Quartz |
| (4) | Electrode | Ag |
| (5) | Epoxy | Silicon based |
| (6) | Soldering Pads | Au plated |



4、 Package: Tape & Reel (mm)



| | |
|----|------------|
| W | 12.00±0.05 |
| E | 1.75±0.10 |
| F | 3.5±0.05 |
| T | 0.25±0.05 |
| P | 8.00±0.10 |
| P0 | 4.00±0.10 |
| P2 | 2.00±0.10 |
| D0 | φ1.55±0.05 |
| D1 | φ1.15MIN |
| A0 | 2.80±0.10 |
| K0 | 1.00±0.10 |
| B0 | 3.50±0.10 |



| | |
|----|------------|
| A | φ178±2.0 |
| B | 2.00±0.50 |
| C | φ13.2±0.20 |
| D | φ20.0 min |
| N | φ60.5±1.0 |
| W1 | 12.5±0.20 |
| T1 | 1.80±0.20 |

DAPU CONFIDENTIAL