

Customer Code : _____

DATASHEET

DAPU P/N: **O22B-K425-10.00MHz**

Customer P/N: _____

| DAPU | | | Customer Approval |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| | | | |
| Date: 2019.10.11 | | | |

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1. Electrical Parameters

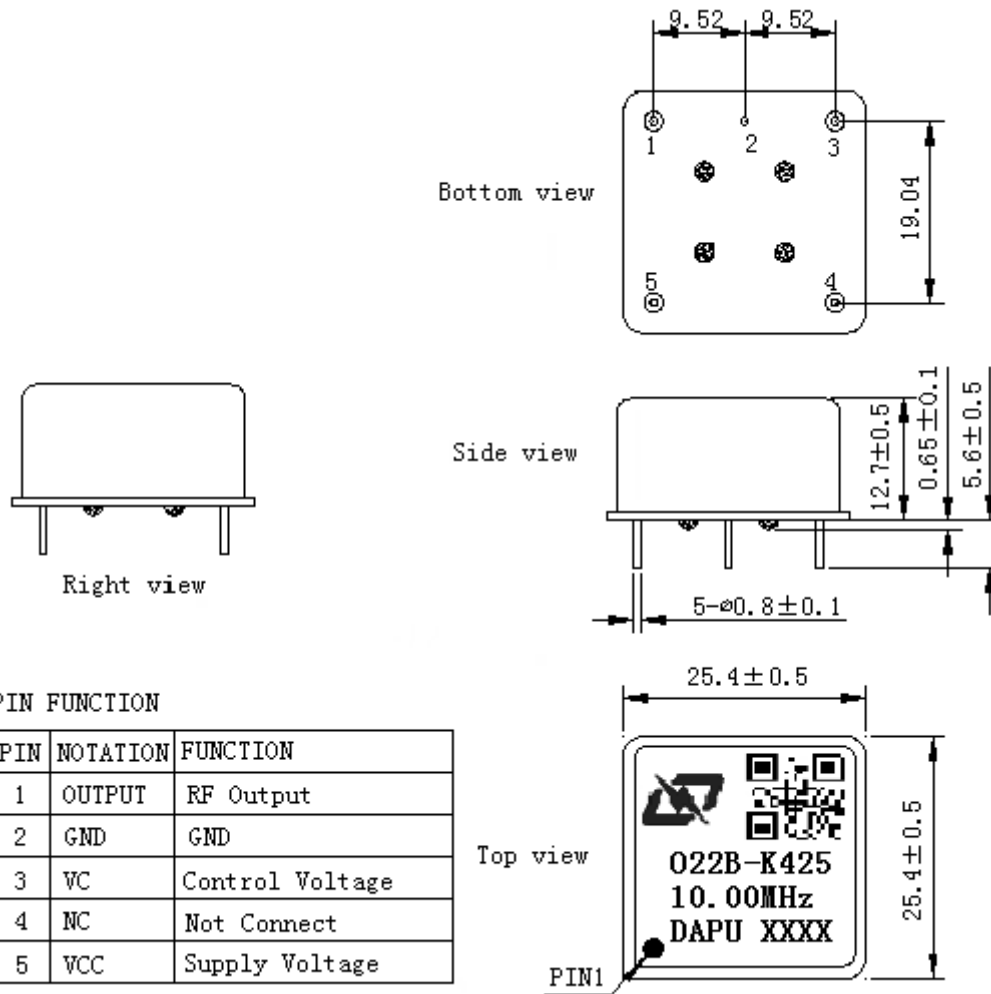
| MODEL: O22B-K425-10.00MHZ | | | | | | |
|---------------------------|---|------------|-------|-------|------------------|--|
| Item | Description | Parameters | | | Unit | Test Condition |
| | | Min. | Typ. | Max. | | |
| Output | Frequency | 10.00 | | | MHz | |
| | Output Waveform | Sine wave | | | | |
| | Level | 8 | 10 | 12 | dBm | |
| | Load | 50 | | | Ω | |
| | Harmonics Suppression | | | -30 | dBc | |
| | Spurious Suppression | | | -75 | dBc | |
| Frequency Stabilities | Frequency Tolerance vs. Operating Temperature Range | -0.05 | | +0.05 | $\times 10^{-6}$ | T_A varied from -40°C to 70°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$, temperature variable speed less than 2°C per minute. |
| | Initial Frequency Tolerance | -0.1 | | +0.1 | $\times 10^{-6}$ | Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$ and after 15 minutes of operation, within 30 days after ex-works. |
| | Frequency Tolerance vs. supply voltage | -1 | | +1 | $\times 10^{-9}$ | measurement referenced to frequency observed $T_A=25^\circ\text{C}$, V_{cc} varied from 4.75V to 5.25V, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$. |
| | Frequency Tolerance vs. Load | -1 | | +1 | $\times 10^{-9}$ | 5% Load Change Measurement referenced to frequency observed with $T_A=25^\circ\text{C}$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$. |
| | Short Term Stability | | 0.005 | | $\times 10^{-9}$ | Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25°C ; 1s, using PN9000 equipment. |
| | Aging Tolerance per day | -0.5 | | +0.5 | $\times 10^{-9}$ | V_{cc}, V_c, T_A constant Measurement referenced to frequency observed with |
| | Aging Tolerance 1Year | -0.05 | | +0.05 | $\times 10^{-6}$ | $T_A=25^\circ\text{C}, V_{\text{cc}}=5.0\text{V}, V_c=2.5\text{V}, O_{\text{load}}=50\Omega$ and after 30 days of operation. |
| Power Supply | Supply Voltage | 4.75 | 5.0 | 5.25 | V | |
| | Current Consumption | | | 400 | mA | @ 25°C |
| | Current Consumption during warm up | | | 800 | mA | |
| | Warm-Up Time | | | 15 | minutes | @ 25°C within $\pm 0.05 \times 10^{-6}$ of final frequency with reference after 30 minutes on. |



| | | | | | | |
|---------------------------------|---|---|------|------|------------------|--|
| Voltage Control Characteristics | Frequency Tuning Range | | | -0.5 | $\times 10^{-6}$ | $V_c=0V$. measurement referenced to $V_c=2.5V$. |
| | | -0.1 | | +0.1 | $\times 10^{-6}$ | $V_c=2.5V$. measurement referenced to exactly 10.00MHz. |
| | | +0.5 | | | $\times 10^{-6}$ | $V_c=5.0V$. measurement referenced to $V_c=2.5V$. |
| | Linearity | | | 10 | % | |
| | Slope | Positive | | | | |
| | Input Impedance | 100 | | | | K Ω |
| Phase Noise | Phase Noise @25°C | | -110 | -108 | dBc/Hz | 1Hz |
| | | | -140 | -138 | | 10Hz |
| | | | -155 | -150 | | 100Hz |
| | | | -165 | -160 | | 1KHz |
| | | | -170 | -165 | | 10KHz |
| | | | -170 | -165 | | 100KHz |
| | | | -172 | -165 | | 1MHz |
| Environmental Conditions | Operable Temperature | -40 | | +70 | °C | |
| | Storage Temperature | -55 | | +105 | °C | |
| | ESD Level | Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010. | | | | |
| | | Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010. | | | | |
| | Moisture Sensitivity Level | Not humidity sensitive. | | | | |
| | Vibration | Frequency range: 20Hz~2000Hz, acceleration : 6g , ASD:0.04g ² /Hz one cycle per 30 min, test 2 hour. (3 times for each 3 directions X , Y , Z), GJB 150.16A-2009 | | | | |
| Shock | 100g; 6ms; half sine wave (3 times for each 3 directions X , Y , Z),GJB 360B-2009 | | | | | |
| Full Package Storage | Relative humidity (%) | 20% ~70% | | | | |
| | Temperature (°C) | -10~35°C | | | | |



2. Mechanical Structure (mm)



PIN FUNCTION

| PIN | NOTATION | FUNCTION |
|-----|----------|-----------------|
| 1 | OUTPUT | RF Output |
| 2 | GND | GND |
| 3 | VC | Control Voltage |
| 4 | NC | Not Connect |
| 5 | VCC | Supply Voltage |

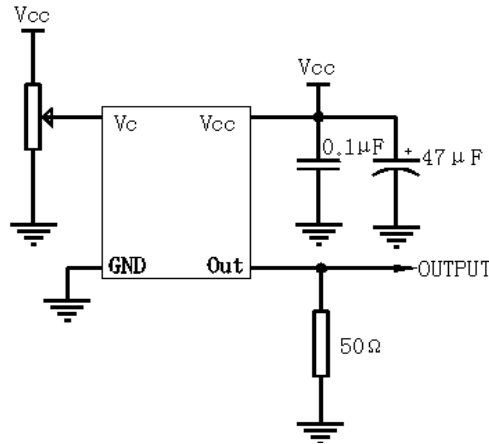
Note1: Tolerance ±0.2mm without mark

Note2: The first two xx representative: week
After two xx representative: year

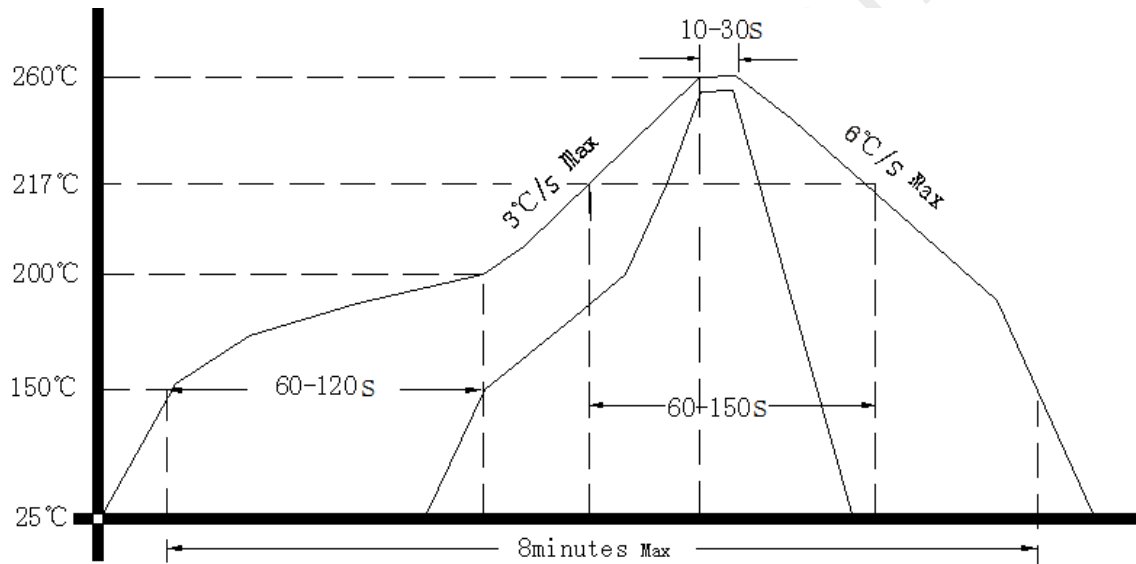
Note3: Referential Weight 13.6g



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)

