

Travelling Merchant: _____

DATASHEET

Standard: **O11A-F425-100.00MHz**

P/N: _____

| Plot | | | The Label |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| | | | |
| Date: 2025.01.06 | | | |

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1. Electrical Parameters

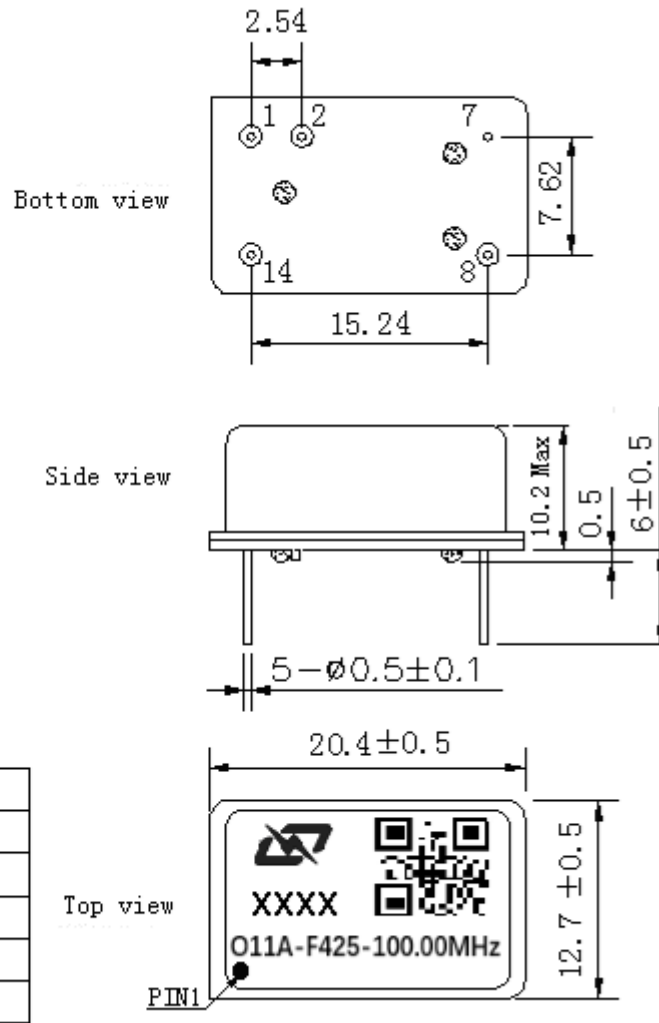
| MODEL: O11A-F425-100.00MHz | | | | | | |
|----------------------------|---|------------|------|-------|------------------|--|
| Item | Description | Parameters | | | Unit | Test Condition |
| | | Min. | Typ. | Max. | | |
| Output | Frequency | 100.00 | | | MHz | |
| | Output Waveform | Sine Wave | | | | |
| | Level | 4 | | 6 | dBm | |
| | Spurious | | | -75 | dBc | |
| | Load | 50 | | | Ω | |
| Frequency Stabilities | Frequency Tolerance vs. Operating Temperature Range | -0.5 | | +0.5 | $\times 10^{-6}$ | T_A varied from -20°C to 70°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=5.0\text{V}$, $O_{\text{load}}=50\Omega$, temperature variable speed less than 2°C per minute. |
| | Initial Frequency Tolerance | -1 | | +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 | -0.01 | | +0.01 | $\times 10^{-6}$ | measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$, V_{cc} varied from 4.75V to 5.25V, $V_c=2.5\text{V}$ and $O_{\text{Load}}=50\Omega$. |
| | Frequency Tolerance vs. Load | -5 | | +5 | $\times 10^{-9}$ | 5% load change measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$ and $O_{\text{Load}}=50\Omega$. |
| | Aging Tolerance Per Day | -5 | | +5 | $\times 10^{-9}$ | V_{cc}, V_c, T_A constant measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, |
| | Aging Tolerance 1 Year | -1 | | +1 | $\times 10^{-6}$ | $V_{\text{cc}}=5.0\text{V}$, $V_c=2.5\text{V}$ and after 30 days of operation. |
| Power Supply | Supply Voltage | 4.75 | 5.0 | 5.25 | V | |
| | Steady Consumption | | | 250 | mA | @ 25°C |
| | Warm up current | | | 600 | mA | |
| | Warm-Up Time | | | 5 | minutes | @ 25°C within $\pm 0.03 \times 10^{-6}$ of final Frequency with reference after 1 hour on. |



| | | | | | | |
|---------------------------------|--|---|--|------|------------------|--|
| Voltage Control Characteristics | Frequency Tuning Range | | | -1 | $\times 10^{-6}$ | $V_c=0V$. measurement referenced to $V_c=2.5V$ |
| | | -1 | | +1 | $\times 10^{-6}$ | $V_c=2.5V$. measurement referenced to exactly 100.00MHz |
| | | +1 | | | $\times 10^{-6}$ | $V_c=5V$. measurement referenced to $V_c=2.5V$ |
| | Linearity | | | 10 | % | |
| | Slope | Positive | | | | |
| | Input Impedance | 100 | | | | K Ω |
| Phase Noise | Phase Noise | | | -75 | dBc/Hz | 10Hz |
| | | | | -110 | | 100Hz |
| | | | | -140 | | 1KHz |
| | | | | -153 | | 10KHz |
| | | | | -155 | | 100KHz |
| Environmental Conditions | Operable Temperature | -20 | | +70 | $^{\circ}C$ | |
| | Storage Temperature | -55 | | +85 | $^{\circ}C$ | |
| | ESD Level | Human Body Model, class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010. | | | | |
| | | Machine Model, class B: 200V to 400V; JEDEC JESD22-A115C. | | | | |
| | Moisture Sensitivity Level | Not humidity sensitive. | | | | |
| | Vibration | Test Condition: 0.75mm ;acceleration:10g;10Hz~500Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X , Y , Z), IEC 68-2-06 Test Fc. | | | | |
| Shock | 50g; 11ms; half sine wave (3 times for each 3 directions X, Y, Z), IEC 68-2-27 Test Ea/Severity 50A. | | | | | |



2. Mechanical Structure (mm)



PIN FUNCTION

| PIN | NOTATION | FUNCTION |
|-----|----------|-----------------|
| 1 | VC | Control Voltage |
| 2 | NC | Not Connect |
| 7 | GND | GND |
| 8 | OUTPUT | RF Output |
| 14 | VCC | Supply Voltage |

Note1: Tolerance ± 0.20mm without mark

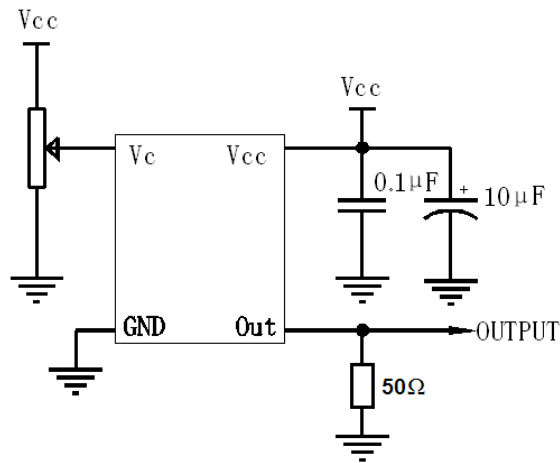
Note2: The first two xx representative: year

After two xx representative: week

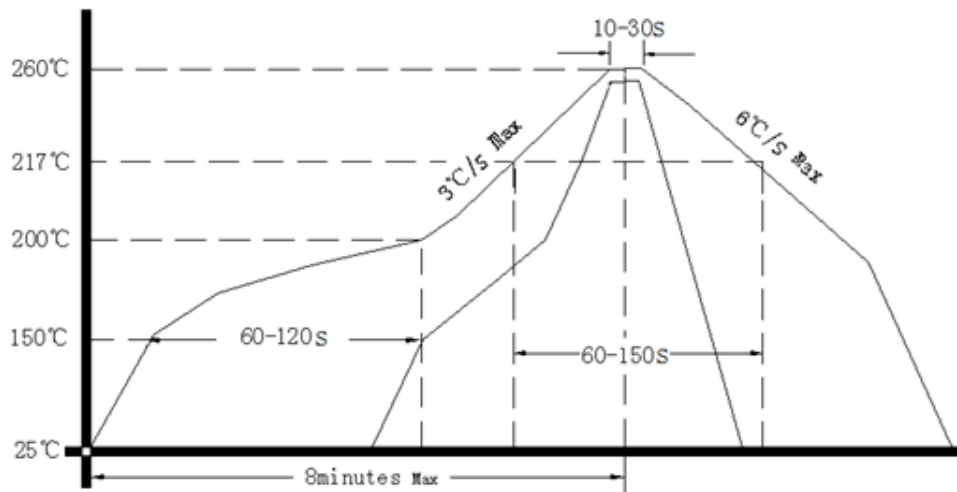
Note3: Referential Weight 4.2g



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package: Tape & Reel (mm)

