

Customer Code : _____

DATASHEET

DAPU P/N: **O55A-A425-10.00MHz-A**

Customer P/N: _____

| DAPU | | | Customer Approval |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| | | | |
| Date: 2020.10.28 | | | |

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

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



Table of amendment

| Version | Revision contents | Prepared by | Revised date |
|---------|--|--------------|--------------|
| 1.0 | The first issued | <i>Amway</i> | 2018.02.09 |
| 1.1 | The “operating temperature range” changed | <i>Amway</i> | 2018.03.08 |
| 1.2 | The “Marking” changed | <i>Amway</i> | 2018.07.17 |
| 1.3 | The “Aging Tolerance Per Day” “Aging Tolerance 1 Year” “ESD Level” changed | <i>Amway</i> | 2020.10.28 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



1. Electrical Parameters

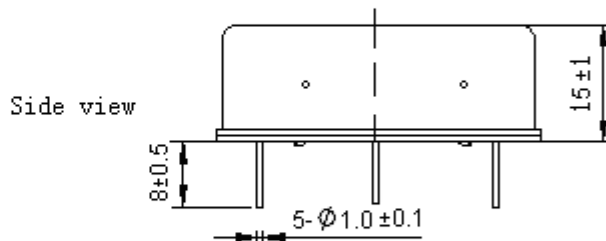
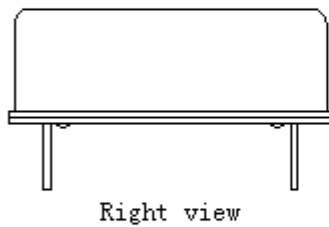
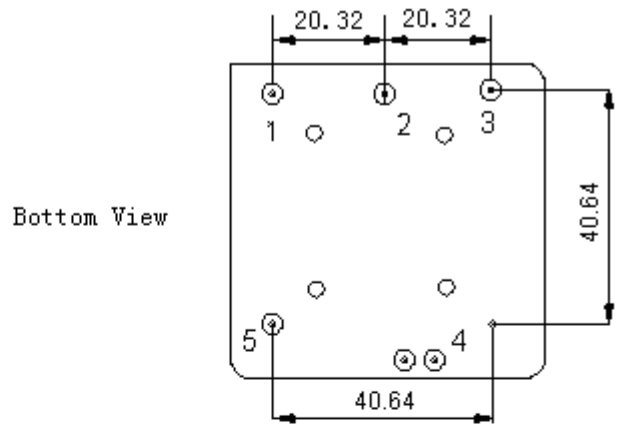
| MODEL: O55A-A425-10.00MHZ-A | | | | | | |
|-----------------------------|---|------------|------|-------|------------------|---|
| Item | Description | Parameters | | | Unit | Test Condition |
| | | Min. | Typ. | Max. | | |
| Output | Frequency | 10.00 | | | MHz | |
| | Output Waveform | Sine wave | | | | |
| | Level | 6 | | 10 | dBm | |
| | Load | 50 | | | Ω | |
| | Harmonics Suppression | | | -40 | dBc | |
| | Spurious Suppression | | | -70 | dBc | |
| Frequency Stabilities | Frequency Tolerance vs. Operating Temperature Range | -0.05 | | +0.05 | $\times 10^{-9}$ | T_A varied from -20°C to 70°C , measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, $O_{load}=50\Omega$, temperature variable speed less than 2°C per minute. |
| | Initial Frequency Tolerance | -0.05 | | +0.05 | $\times 10^{-6}$ | Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, and after 15 minutes of operation, within 30 days after ex-works. |
| | Frequency Tolerance vs. Supply Voltage | -0.01 | | +0.01 | $\times 10^{-9}$ | measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$, V_{cc} varied from 4.75V to 5.25V, $V_c=2.5\text{V}$, $O_{load}=50\Omega$. |
| | Frequency Tolerance vs. Load | -0.01 | | +0.01 | $\times 10^{-9}$ | 5% load change measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, and $O_{Load}=50\Omega$. |
| | Short-Term Stability: Allan Variance | | | 0.005 | $\times 10^{-9}$ | Temperature stability, no EMI\EMC or other interference, test after power for 1hour ref. to 25°C ; 1s. |
| | Aging Tolerance Per Day | -0.1 | | +0.1 | $\times 10^{-9}$ | V_{cc}, T_A constant measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{cc}=5.0\text{V}$, $V_c=2.5\text{V}$, and after 30 days of operation. |
| | Aging Tolerance 1 Year | -0.01 | | +0.01 | $\times 10^{-6}$ | |
| Power Supply | Supply Voltage | 4.75 | 5.0 | 5.25 | V | |
| | Steady Consumption | | | 1000 | mA | @ 25°C |
| | Warm up current | | | 2600 | mA | |



| | | | | | | |
|---------------------------------|---|---|------|-------|------------------|--|
| Voltage Control Characteristics | Frequency Tuning Range | -0.5 | | -0.3 | $\times 10^{-6}$ | $V_c=0V$. measurement referenced to $V_c=2.5V$. |
| | | -0.05 | | +0.05 | $\times 10^{-6}$ | $V_c=2.5V$. measurement referenced to exactly 10.00MHz. |
| | | +0.3 | | +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 | | -130 | -120 | dBc/Hz | 10Hz |
| | | | -145 | -135 | | 100Hz |
| | | | -150 | -145 | | 1KHz |
| | | | -155 | -150 | | 10KHz |
| | | | -155 | -150 | | 100KHz |
| | | | -155 | -150 | | 1MHz |
| Environmental Conditions | Operable Temperature | -20 | | +70 | $^{\circ}C$ | |
| | Storage Temperature | -55 | | +105 | $^{\circ}C$ | |
| | 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. | | | | | |
| Full Package Storage | Relative humidity (%) | 20% ~70% | | | | |
| | Temperature ($^{\circ}C$) | -10~35 $^{\circ}C$ | | | | |



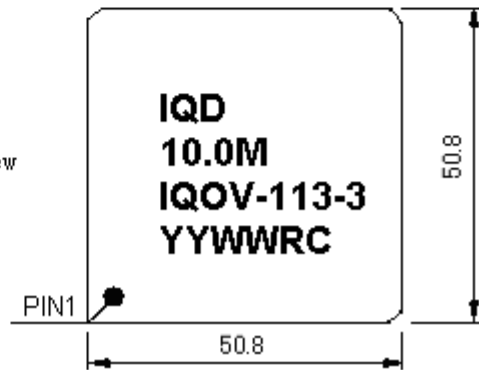
2. Mechanical Structure(mm)



PIN FUNCTION

| PIN | NOTATION | FUNCTION |
|-----|----------|-----------------|
| 1 | VC | Control Voltage |
| 2 | VREF | Vref=4.5V |
| 3 | OUTPUT | RF Output |
| 4 | GND | GND |
| 5 | VCC | Supply Voltage |

Top View



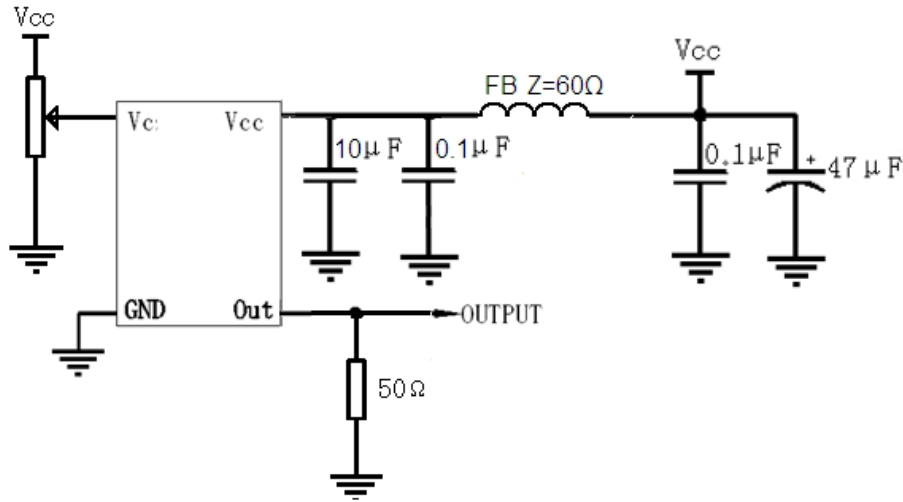
Note1: Tolerance $\pm 0.2\text{mm}$ without mark

Note2: Referential weight 56.1g

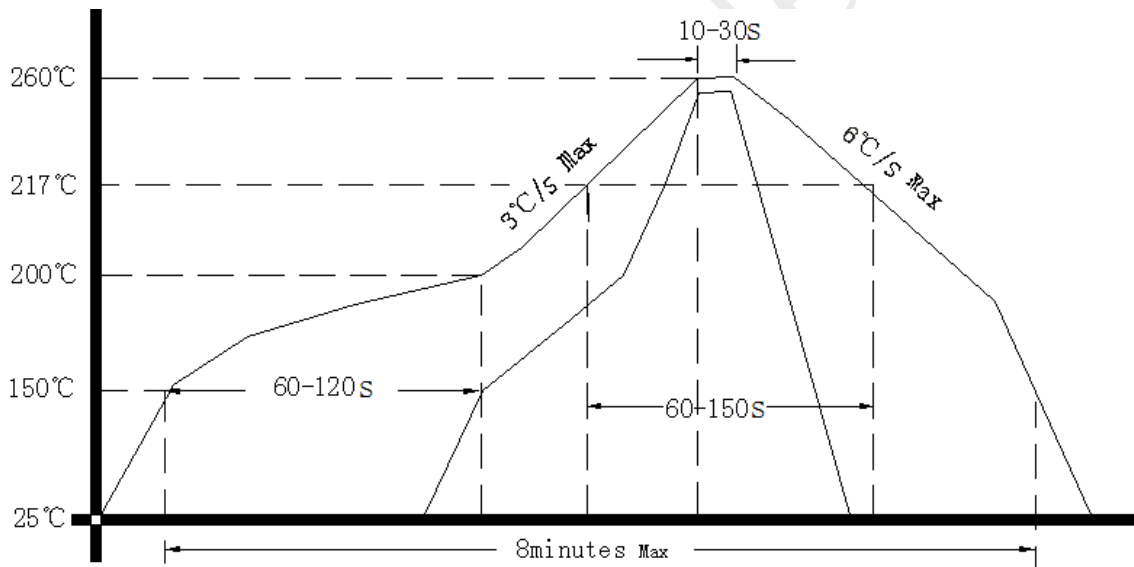
Note3: The YY representative: year
After two WW representative: week



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package (mm)

