

Customer Code : _____

DATASHEET

DAPU P/N: 054A-E445-10.00MHz

Customer P/N: _____

| DAPU | | | Customer Approval |
|------------------|---------|----------|------------------------|
| Drew | Audited | Approved | Stamp, please! Thanks! |
| | | | |
| Date: 2020.11.30 | | | |

Guangdong Dapu Telecom Technology Co.,Ltd

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

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



1. Electrical Parameters

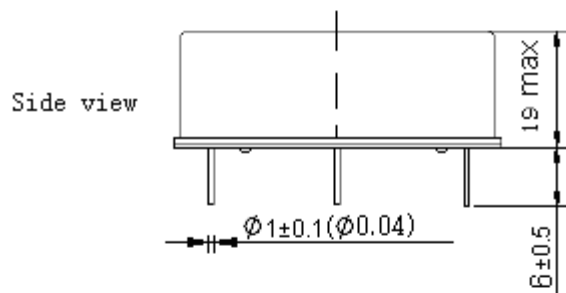
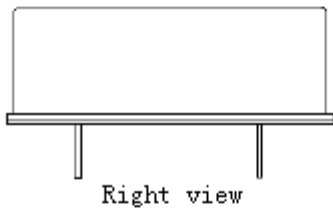
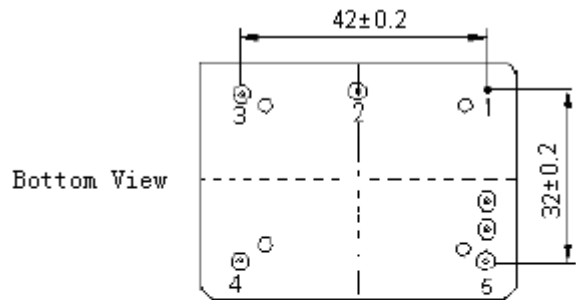
| MODEL: O54A-E445-10.00MHz | | | | | | |
|---------------------------|---|------------|------|-------|-------------------|---|
| Item | Description | Parameters | | | Unit | Test Condition |
| | | Min. | Typ. | Max. | | |
| Output | Frequency | 10.00 | | | MHz | |
| | Output Waveform | Sine wave | | | | |
| | Level | 5 | 7 | 9 | dBm | |
| | Load | 50 | | | Ω | |
| | Harmonics Suppression | | | -40 | dBc | |
| | Spurious Suppression | | | -80 | dBc | |
| Frequency Stabilities | Frequency Tolerance vs. Operating Temperature Range | -0.1 | | +0.1 | $\times 10^{-9}$ | T_A varied from -20°C to 70°C , measurement referenced to frequency observed with $f_{\text{ref}}=(f_{\text{max}}+f_{\text{min}})/2$, $V_{\text{cc}}=12\text{V}$, $O_{\text{load}}=50\Omega$, 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 $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=12\text{V}$, $V_c=2.5\text{V}$ and after 15 minutes of operation, within 30 days after ex-works. |
| | Frequency Tolerance vs. supply voltage | -0.1 | | +0.1 | $\times 10^{-9}$ | measurement referenced to frequency observed $T_A=25^{\circ}\text{C}$, V_{cc} varied from 11.4V to 12.6V, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$. |
| | Frequency Tolerance vs. Load | -0.1 | | +0.1 | $\times 10^{-9}$ | 10% Load Change Measurement referenced to frequency observed with $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=12\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$. |
| | Short Term Stability | | | 5 | $\times 10^{-12}$ | 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}, V_c, T_A constant Measurement referenced to frequency observed with |
| | Aging Tolerance 1 Year | -0.03 | | +0.03 | $\times 10^{-6}$ | $T_A=25^{\circ}\text{C}$, $V_{\text{cc}}=12\text{V}$, $V_c=2.5\text{V}$, $O_{\text{load}}=50\Omega$ and after 30 days of operation. |



| | | | | | | |
|---------------------------------|---|---|------|-------|------------------|--|
| Power Supply | Supply Voltage | 11.4 | 12 | 12.6 | V | |
| | Steady Consumption | | | 250 | mA | @25°C |
| | Warm up current | | | 700 | mA | |
| | Warm-Up Time | | | 10 | minutes | @25°C ±1°C within $\pm 0.01 \times 10^{-6}$ of final frequency with reference after 1 hour on. |
| Voltage Control Characteristics | Frequency Tuning Range | | | -0.35 | $\times 10^{-6}$ | $V_c=0V$. measurement referenced to $V_c=2.5V$. |
| | | -0.1 | | +0.1 | $\times 10^{-6}$ | $V_c=2.5V$. measurement referenced to exactly 10.00MHz. |
| | | +0.35 | | | $\times 10^{-6}$ | $V_c=5.0V$. measurement referenced to $V_c=2.5V$. |
| | Linearity | | | 10 | % | |
| | Slope | Positive | | | | |
| | Input Impedance | 100 | | | | K Ω |
| Phase Noise | Phase Noise | | -105 | -100 | dBc/Hz | 1Hz |
| | | | -135 | -130 | | 10Hz |
| | | | -155 | -150 | | 100Hz |
| | | | -160 | -155 | | 1KHz |
| | | | -163 | -158 | | 10KHz |
| Environmental Conditions | Operable Temperature | -20 | | +70 | °C | |
| | Storage Temperature | -55 | | +95 | °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 (°C) | -10~35°C | | | | |

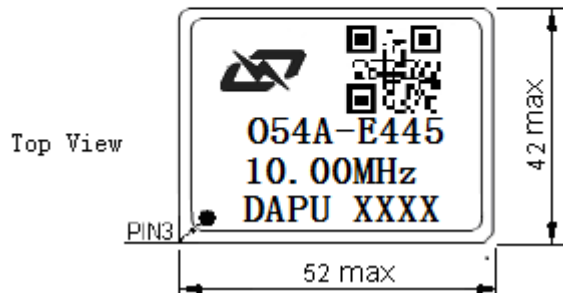


2. Mechanical Structure (mm)



PIN FUNCTION

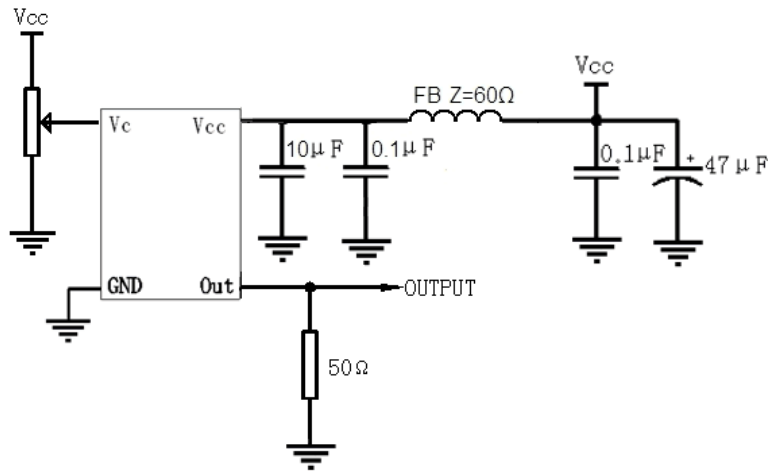
| PIN | NOTATION | FUNCTION |
|-----|----------|----------------------|
| 1 | GND | GND |
| 2 | WC | Control Voltage |
| 3 | VREF | Reference Voltage 5V |
| 4 | WCC | Supply Voltage |
| 5 | OUTPUT | RF Output |



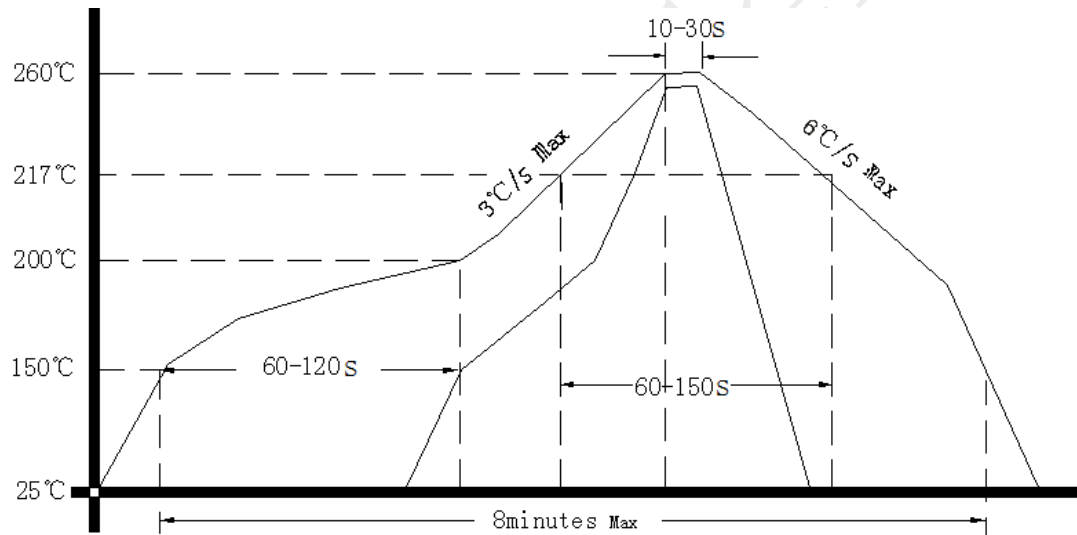
- Note1:** Tolerance $\pm 0.20\text{mm}$ without mark
Note2: The first two xx representative: week
 After two xx representative: year
Note3: Referential weight 78g
Note4: NC is not connect



3. Test Circuit



4. Reflow Soldering Curve (RoHS)



5. Package(mm)

