

- Low ESR, high ripple current
- Load life of 2000 hours at 105°C
- RoHS Compliant

◆ 规格表 Specifications

| 项目 Items | 特性参数 Characteristics | | | | | | | | | | | |
|--|---|-------------------------------|---|-----|-----|-----|----------|----|----|----|----|------------------|
| 使用温度范围 Category Temperature Range | -55 ~ +105°C | | | | | | | | | | | |
| 额定工作电压范围 Rated Voltage Range | 2.5 ~ 25V | | | | | | | | | | | |
| 静电容量允许偏差 Capacitance tolerance | ±20%(M) (at 20°C, 120Hz) | | | | | | | | | | | |
| 漏电流 Leakage Current | 施加额定工作电压2分钟后读数, 小于或等于规格值 (at 20°C) I ≤ 0.2CV 或 500μA (取大值) Less than or equal to the specified value. After 2 minutes application of rated Voltage at 20°C | | | | | | | | | | | |
| 损耗角正切值 tanδ Dissipation Factor | Rated voltage (V) | 2.5 | 4 | 6.3 | 6.8 | 7.5 | 10 | 12 | 16 | 20 | 25 | (at 20°C, 120Hz) |
| | tanδ (Max.) | 0.08 | | | | | 0.12 | | | | | |
| 温度特性 Low Temperature Characteristics (Max. Impedance Ratio) | Z(-25°C)/Z(+20°C) | ≤ 1.25 | | | | | (100KHz) | | | | | |
| | Z(-55°C)/Z(+20°C) | ≤ 1.25 | | | | | | | | | | |
| 耐久性 Endurance | 105°C 施加额定工作电压2000小时, 恢复到20°C后, 产品性能应满足以下要求 The specifications listed below shall be satisfied when the capacitors are restored to 20°C after application of rated voltage for 2000 hours at 105°C. | | | | | | | | | | | |
| | Appearance | No significant damage | | | | | | | | | | |
| | Capacitance change | ≤ ±20% of the initial value | | | | | | | | | | |
| | D.F.(tanδ) | ≤ 150% of the specified value | | | | | | | | | | |
| | ESR | ≤ 150% of the specified value | | | | | | | | | | |
| 耐湿负荷特性 Damp Heat (Steady State) | 在60°C 温度, 湿度90%~95%RH的环境中, 施加额定电压1000小时后, 恢复到20°C后, 产品性能应满足以下要求 The specifications listed below shall be satisfied when the capacitors are restored to 20°C after application of rated voltage for 1000 hours at 60°C, 90%~95% RH. | | | | | | | | | | | |
| | Appearance | No significant damage | | | | | | | | | | |
| | Capacitance change | ≤ ±20% of the initial value | | | | | | | | | | |
| | D.F.(tanδ) | ≤ 150% of the specified value | | | | | | | | | | |
| | ESR | ≤ 150% of the specified value | | | | | | | | | | |
| 浪涌电压特性 (Surge Voltage) | 浪涌电压=额定电压×1.15(V) Surge Voltage=Rated voltage × 1.15(V) 在105°C 环境中, 按充电30秒; 放电5分30秒, 连续施加浪涌电压1000次(Rc=1kΩ), 待恢复后测试, 应满足以下要求 The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages specified at 105°C for 30 seconds through a protective resistor (Rc=1kΩ) and discharge for 5 minutes 30 seconds | | | | | | | | | | | |
| | Appearance | No significant damage | | | | | | | | | | |
| | Capacitance change | ≤ ±20% of the initial value | | | | | | | | | | |
| | D.F.(tanδ) | ≤ 150% of the specified value | | | | | | | | | | |
| | ESR | ≤ 150% of the specified value | | | | | | | | | | |
| | Leakage current | ≤ The specified value | | | | | | | | | | |

◆ 外形图 Dimensions (mm)

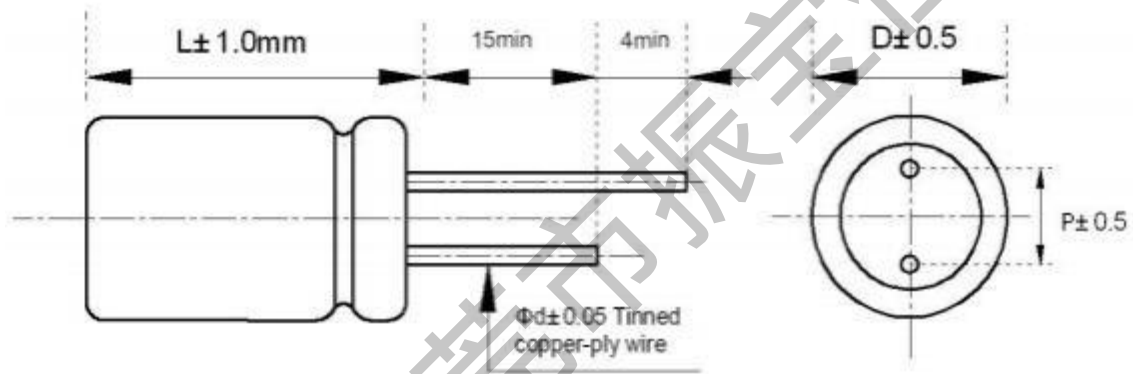


| | | | | |
|----|-----|-----|-----|-----|
| ΦD | 5 | 6.3 | 8 | 10 |
| P | 2.0 | 2.5 | 3.5 | 5.0 |
| Φd | 0.5 | 0.6 | 0.6 | 0.6 |

| | |
|---|-------------------|
| α | (L < 16) 1.0 |
| | (16 ≤ L < 22) 1.5 |
| | (L ≥ 22) 2.0 |

基本特性参数表 Characteristics

| Part No/ Ruilong | Capacitance. (uF) 120Hz/+20°C | Capacitance Tolerance. (%) 120Hz/+20°C | Rated Voltage (VDC) | Surge Voltage (VDC) | tanδ 120Hz/+ 20°C | Leakage Current 2 min(uA) +20°C | ESR 100KHz +20°C (mΩ) | Ripple Current. 100KHz (mArms) | Load Life (Hrs) | Category Temperature Range | Dimensions(mm) | | Colour |
|--------------------|-------------------------------------|---|---------------------------|---------------------------|-------------------------|---|---------------------------------|--|-----------------------|----------------------------------|-----------------|----|--------|
| | | | | | | | | | | | ΦD | L | |
| JBLE2821M010D110RL | 820 | ±20 | 10 | 11.5 | 0.12 | 1640 | 7 | 5600 | 2000 | -55~+105°C | 8 | 11 | 红色 |



◆ 纹波电流修正系数 Rated Ripple Current Coefficient

| 频率 Frequency(Hz) | $120\text{Hz} \leq F < 1\text{KHz}$ | $1\text{KHz} \leq F < 10\text{KHz}$ | $10\text{KHz} \leq F < 100\text{KHz}$ | $100\text{KHz} \leq F < 500\text{KHz}$ |
|------------------|-------------------------------------|-------------------------------------|---------------------------------------|--|
| 系数 Case code | 0.05 | 0.30 | 0.70 | 1.00 |