

HDS Ultra low impedance
极低阻抗

- Low impedance, 105°C 2000hours High CV.
- Applicable to SMT process
- Rohs Compliance.
- 105°C低阻抗、2000hours高比容产品。
- 适用于SMT制程。



■ Specifications 特性表

| Items 项目 | Characteristics 特性 | | | | | | |
|--|---|---|------|------|--------------------|---------------------------------|------|
| Capacitance Tolerance 静电容量误差 | ±20% (120Hz , 20°C) | | | | | | |
| Operating Temperature Range 适用温度范围 | - 55°C ~ + 105°C | | | | | | |
| Rated Voltage Range 额定电压范围 | 6.3~50VDC | | | | | | |
| Capacitance Range 静电容量范围 | 10~2200µF | | | | | | |
| Leakage Current 漏电流 | $I \leq 0.01CV$ or 3 (µA) , which is greater. (After 2 minutes application of DC rated voltage, at 20°C) | | | | | | |
| Dissipation Factor 损失角正切值 (tan δ) | Measurement Frequency:120Hz. Temperature: 20°C | | | | | | |
| | Rated Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | tanδ (Max) | 0.26 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 |
| Low Temperature Stability 低温特性 Impedance Ratio(Max) 阻抗比率 最大值) | Measurement Frequency:120Hz | | | | | | |
| | Rated Voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | Z(-25°C) / Z(20°C) | 4 | 3 | 2 | 2 | 2 | 2 |
| | Z(-55°C) / Z(20°C) | 8 | 5 | 4 | 3 | 3 | 3 |
| Load Life 负荷寿命 | 2000hours,with application of rated voltage at 105°C | | | | | | |
| | Capacitance Change | within ±30% of Initial Value | | | | | |
| | tan δ | 200% or less of Initial Specified Value | | | | | |
| | Leakage Current | Initial Specified Value or less | | | | | |
| Shelf Life 放置寿命 | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000hours 105°C without voltage applied. Before the measurement. The Capacitance shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4. | | | | | | |
| | Capacitance Change | within ±30% of Initial Value | | | | | |
| | tan δ | 200% or less of Initial Specified Value | | | | | |
| | Leakage Current | Initial Specified Value or less | | | | | |
| Resistance to Soldering Heat 焊锡耐热性 | The capacitors shall be kept on the hott plate maintained at 250°C for 30seconds. | | | | Capacitance Change | Within ± 10% of Initial Value | |
| | After removing from the hot plate and restored at room temperature they meet the characteristics requirements listed at right. | | | | tan δ | Initial Specified Value | |
| | | | | | Leakage Current | Initial Specified Value or less | |
| | | | | | | | |
| Standards 参照标准 | JIS C 5101-4-1 (IEC 60384) | | | | | | |

Frequency Coefficient of Permissible Ripple Current

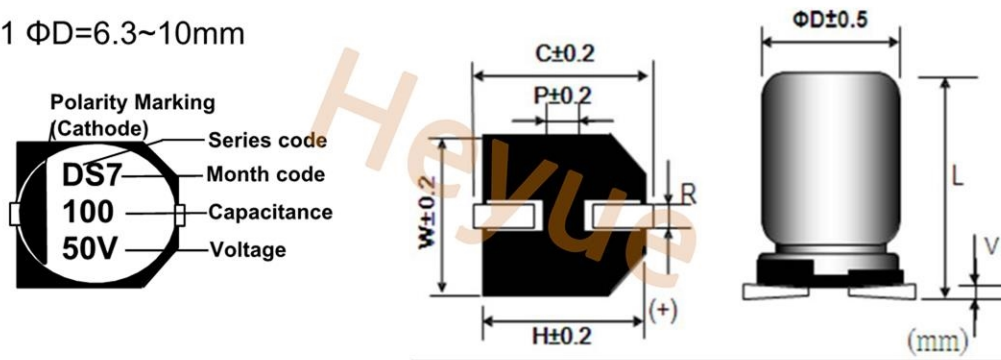
| Frequency (Hz) | 120 ≤ F < 1K | 1K ≤ F < 10K | 10K ≤ F < 100K | 100K ≤ F |
|------------------|--------------|--------------|----------------|----------|
| Capacitance (µF) | | | | |
| ≤ 470 | 0.65 | 0.85 | 0.95 | 1.00 |
| >470 | 0.70 | 0.90 | 0.95 | 1.00 |

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.when long life performance is required in actual use. The rms ripple current has to be reduced.

注: 以上所提供的设计及特性参数仅供参考, 任何修改不作预先通知, 如有使用上任何疑问, 请在采购前与我们联系, 以便提供技术上的协助.

■ DIMENSIONS(mm) 外形图

Fig.1 $\Phi D=6.3\sim 10\text{mm}$



(mm)

| Size | ΦD | L | W | H | C | R | P | Vmax |
|---------|----------|---------|------|------|------|---------|-----|------|
| 4x6.0 | 4.0 | 6.0±0.3 | 4.3 | 4.3 | 5.1 | 0.5-0.8 | 1.0 | 0.3 |
| 5x6.0 | 5.0 | 6.0±0.3 | 5.3 | 5.3 | 5.9 | 0.5-0.8 | 1.5 | 0.3 |
| 6.3x6.0 | 6.3 | 6.0±0.3 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 2.1 | 0.3 |
| 6.3x7.7 | 6.3 | 7.7±0.3 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 2.1 | 0.3 |
| 8x10 | 8.0 | 10±0.5 | 8.4 | 8.4 | 9.0 | 0.7-1.1 | 3.2 | 0.3 |
| 10x10 | 10.0 | 10±0.5 | 10.4 | 10.4 | 11.0 | 0.7-1.3 | 4.5 | 0.3 |

■ Standard ratings 标准品一览表

DxL(mm) ; R.C.(mA rms) at 105°C 100KHz, IMP(Ω max) at 20°C 100KHz.

| Cap (μF) | V | 6.3 | | | 10 | | | 16 | | | 25 | | | 35 | | | 50 | | |
|--------------------------|---|---------|-------|------|---------|-------|-------|---------|-------|-------|---------|-------|------|---------|-------|------|---------|-------|------|
| | | Item | D x L | R.C. | IMP | D x L | R.C. | IMP | D x L | R.C. | IMP | D x L | R.C. | IMP | D x L | R.C. | IMP | D x L | R.C. |
| 10 | | | | | | | | | | | | | | | | | 4x6.0 | 85 | 2.30 |
| | | | | | | | | | | | | | | | | | 5x6.0 | 165 | 0.88 |
| 22 | | | | | | | | | | | 4x6.0 | 160 | 0.85 | 4x6.0 | 160 | 0.85 | 5x6.0 | 165 | 0.88 |
| 33 | | | | | | | | | | | 4x6.0 | 160 | 0.85 | 5x6.0 | 240 | 0.40 | | | |
| 47 | | | | | | | | 4x6.0 | 160 | 0.85 | 5x6.0 | 240 | 0.36 | 5x6.0 | 240 | 0.36 | 6.3x6.0 | 195 | 0.68 |
| 68 | | | | | 4x6.0 | 160 | 0.85 | 5x6.0 | 240 | 0.36 | 5x6.0 | 240 | 0.36 | 6.3x6.0 | 300 | 0.26 | | | |
| 100 | | 4x6.0 | 160 | 0.85 | | | | 5x6.0 | 240 | 0.36 | 6.3x6.0 | 300 | 0.26 | 6.3x6.0 | 300 | 0.26 | 6.3x7.7 | 350 | 0.34 |
| 150 | | | | | 5x6.0 | 240 | 0.36 | 6.3x6.0 | 300 | 0.26 | 6.3x7.7 | 600 | 0.16 | 6.3x7.7 | 600 | 0.16 | | | |
| 220 | | 5x6.0 | 240 | 0.36 | 6.3x6.0 | 300 | 0.26 | 6.3x6.0 | 300 | 0.26 | 6.3x7.7 | 600 | 0.16 | | | | 8x10 | 670 | 0.18 |
| 330 | | 6.3x6.0 | 300 | 0.26 | 6.3x7.7 | 600 | 0.16 | 6.3x7.7 | 600 | 0.160 | | | | 8x10 | 850 | 0.08 | 10x10 | 900 | 0.12 |
| 470 | | 6.3x7.7 | 600 | 0.16 | 6.3x7.7 | 600 | 0.16 | | | | 8x10 | 850 | 0.08 | | | | | | |
| 560 | | | | | | | | | | | | | | 10x10 | | | | | |
| 680 | | 6.3x7.7 | 600 | 0.16 | | | | 8x10 | 850 | 0.08 | | | | | | | | | |
| 820 | | | | | | | | | | | 10x10 | 1190 | 0.06 | | | | | | |
| 1000 | | | | | 8x10 | 850 | 0.08 | 10x10 | 1190 | 0.06 | | | | | | | | | |
| 1500 | | 8x10 | 850 | 0.08 | 10x10 | 1190 | 0.060 | | | | | | | | | | | | |
| 2200 | | 10x10 | 1190 | 0.06 | | | | | | | | | | | | | | | |

注：以上所提供的设计及特性参数仅供参考，任何修改不作预先通知，如有使用上任何疑问，请在采购前与我们联系，以便提供技术上的协助。