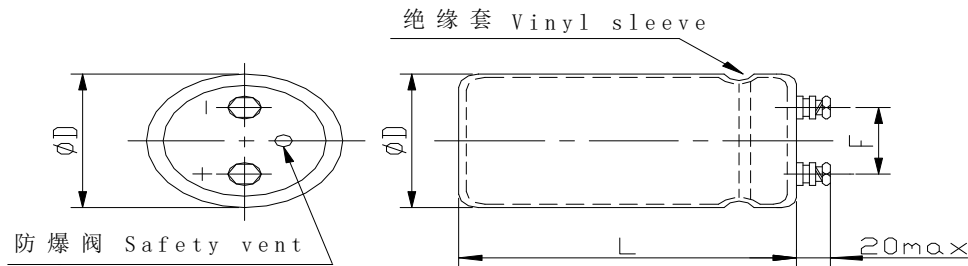


◆产品结构
Product Structure


| | | |
|------------------|------------------|------------------|
| $D \pm 2.0$ (mm) | $L \pm 3.0$ (mm) | $F \pm 1.0$ (mm) |
|------------------|------------------|------------------|

◆主要特性表
Main specifications

| 项目 Item | 主要特性 Performance Characteristics | | | | | | | | | | | | | | |
|--|------------------------------------|--|------|------|------|------|-------------|------|------|---------|---------|-----|-----|-----|-----|
| 额定工作电压范围 Rated Voltage Range | 10~100V.DC | | | | | | 160~450V.DC | | | | | | | | |
| 使用温度范围 Operating Temperature Range | -40℃~+105℃ | | | | | | -25℃~+105℃ | | | | | | | | |
| 标称静电容量范围 Nominal Capacitance Range | 220~680000μF | | | | | | | | | | | | | | |
| 静电容量允许偏差 Capacitance Tolerance | ±20% (M, +25℃, 120Hz) | | | | | | | | | | | | | | |
| 漏电流 Leakage Current (25℃) | 额定工作电压(V) Rated working voltage | 10~450 | | | | | | | | | | | | | |
| | 漏电流 Leakage current | 5 分钟后 $I \leq 0.02CV$ (μA) 或 5(mA), 取最大值 After 5 min. $I \leq 0.02CV$ (μA) 或 5(mA), Whichever is greater. | | | | | | | | | | | | | |
| C: 标称静电容量 (μF) Nominal Capacitance in μF V: 额定工作电压 (V) Rated working voltage in V | | | | | | | | | | | | | | | |
| 损耗角正切 DF Dissipation Factor | WV(V) ϕD | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160~250 | 350~450 | | | | |
| | 35 | 0.75 | 0.60 | 0.40 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.15 | 0.20 | | | | |
| | 50 | 1.00 | 0.70 | 0.50 | 0.50 | 0.30 | 0.25 | 0.20 | 0.20 | 0.15 | 0.20 | | | | |
| | 65 | 1.30 | 0.80 | 0.70 | 0.60 | 0.50 | 0.30 | 0.25 | 0.25 | 0.20 | 0.25 | | | | |
| | 76~90 | 1.50 | 1.00 | 0.80 | 0.70 | 0.60 | 0.40 | 0.30 | 0.25 | 0.20 | 0.25 | | | | |
| 浪涌电压 Surge Voltage | 额定工作电压(V) Rated working voltage | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160 | 200 | 250 | 350 | 400 | 450 |
| | 浪涌电压(V) Surge voltage | 13 | 20 | 32 | 44 | 63 | 79 | 100 | 125 | 200 | 250 | 300 | 400 | 450 | 500 |

| | | | | | |
|-------------------------------|---|--|---------|---------|------------|
| 温度特性 Temperature Stability | 额定工作电压(V) Rated working voltage | | 10~100 | 160~250 | 350~450 |
| | 阻抗比(120Hz) Impedance Ratio | $z-25^{\circ}\text{C}/z+25^{\circ}\text{C}$ $z-40^{\circ}\text{C}/z+25^{\circ}\text{C}$ | 4 12 | 6 | 9 ----- |
| 高温负荷特性 Load life | <p>在+105℃环境中施加额定工作电压和最大允许纹波电流 5000 小时后,电容器的性能符合下面要求:</p> <p>After application of rated working voltage with max permissible ripple current specified at +105℃ for 2000 hours, capacitors meet the characteristics requirements measured at +20℃ listed at below:</p> <p>1、电容量变化率:±15%初始测量值以内 Capacitance change : ±15% initial measured value</p> <p>2、漏电流: ≤初始规定值 Leakage current: ≤initial specified value</p> <p>3、损耗角正切值≤150%倍初始规定值 Dissipation factor: ≤150% initial specified value</p> | | | | |
| 高温贮存特性 Shelf life | <p>在+105℃环境无负荷放置 1000 小时后, 根据 JIS-C-5101-4, 加额定电压 30min., 常温放置 24~48 后测试, 电容器的性能符合下面要求:</p> <p>After leaving capacitors under no load at +105℃for 1000 hours, According to JIS-C-5101-4, apply the rated DC voltage for 30 minutes and store the capacitors under room temperature for 24-48 hours. The capacitors meet the characteristics listed as below:</p> <p>1、电容量变化率:±20%初始测量值以内 Capacitance change : ±20% initial measured value</p> <p>2、漏电流: ≤200%初始规定值 Leakage current: ≤200% initial specified value</p> <p>3、损耗角正切值≤200%倍初始规定值 Dissipation factor: ≤200% initial specified value</p> | | | | |

◆尺寸表、允许纹波、电流纹波电流频率因子

Dimensions and ripple current and frequency coefficient

纹波电流频率因子

Ripple current frequency coefficient

| Frequency(Hz) | | 50 (60) | 100 (120) | 400 | 1K | ≥10K |
|---------------|-----------|------------|--------------|------|------|------|
| Coefficient | 10~50WV | 0.8 | 1.0 | 1.03 | 1.05 | 1.08 |
| | 63~100WV | 0.8 | 1.0 | 1.05 | 1.07 | 1.08 |
| | 160~450WV | 0.8 | 1.0 | 1.10 | 1.13 | 1.18 |

| | | | | | | | | | | | | | | |
|--------|--------|------|--------|------|--|--|--|--|--|--|--|--|--|--|
| 470000 | 76×120 | 20.0 | 76×150 | 26.7 | | | | | | | | | | |
| 560000 | 76×140 | 24.1 | 90×140 | 29.1 | | | | | | | | | | |
| 680000 | 90×140 | 26.5 | | | | | | | | | | | | |

(1)外形尺寸 Case Size D×L(mm)

(2)最大允许纹波电流 Max allowable ripple current (A rms +105°C,120Hz)

| WV/V Cap/μF | 100 | | 160 | | 200 | | 250 | | 350 | | 400 | | 450 | |
|----------------|--------|------|--------|------|--------|------|--------|------|--------|-----|--------|-----|--------|-----|
| | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) | (1) | (2) |
| 220 | | | | | | | | | | | 35×50 | 0.9 | 35×50 | 1.0 |
| 270 | | | | | | | | | 35×50 | 1.0 | 35×50 | 1.0 | 35×60 | 1.0 |
| 330 | | | | | | | | | 35×50 | 1.2 | 35×60 | 1.2 | 35×60 | 1.2 |
| 390 | | | | | | | | | 35×60 | 1.3 | 35×80 | 1.3 | 35×80 | 1.4 |
| 470 | | | | | | | 35×50 | 1.3 | 35×80 | 1.5 | 35×80 | 1.5 | 35×100 | 1.5 |
| 560 | | | | | 35×50 | 1.4 | 35×60 | 1.6 | 35×80 | 1.6 | 35×100 | 1.7 | 35×100 | 1.7 |
| 680 | | | | | 35×50 | 1.5 | 35×80 | 1.7 | 35×100 | 1.9 | 35×100 | 1.9 | 50×80 | 2.3 |
| 820 | | | 35×50 | 1.4 | 35×80 | 1.9 | 35×80 | 1.9 | 35×120 | 2.2 | 35×120 | 2.1 | 50×100 | 2.4 |
| 1000 | | | 35×50 | 1.9 | 35×80 | 2.2 | 35×100 | 2.3 | 50×80 | 2.3 | 50×100 | 2.5 | 50×120 | 2.7 |
| 1200 | | | 35×80 | 2.3 | 35×80 | 2.3 | 35×100 | 2.4 | 50×100 | 2.7 | 50×100 | 2.7 | 50×120 | 3.0 |
| 1500 | | | 35×80 | 2.6 | 35×100 | 2.9 | 35×120 | 2.9 | 50×100 | 3.1 | 50×120 | 3.3 | 65×100 | 3.5 |
| 1800 | | | 35×80 | 2.6 | 35×100 | 2.9 | 35×120 | 3.0 | 50×120 | 3.6 | 65×100 | 3.8 | 65×120 | 3.6 |
| 2200 | 35×50 | 2.9 | 35×100 | 3.2 | 35×120 | 3.3 | 50×120 | 3.8 | 65×100 | 4.2 | 65×120 | 4.6 | 76×100 | 4.1 |
| 2700 | 35×60 | 3.4 | 35×120 | 3.2 | 50×80 | 3.8 | 50×120 | 4.5 | 65×120 | 4.3 | 76×100 | 4.6 | 76×120 | 4.8 |
| 3300 | 35×80 | 3.9 | 35×120 | 3.7 | 50×100 | 4.7 | 65×100 | 5.2 | 76×100 | 4.9 | 76×120 | 5.3 | 76×140 | 5.7 |
| 3900 | 35×80 | 4.2 | 50×100 | 4.3 | 50×120 | 5.4 | 65×120 | 5.2 | 76×120 | 5.8 | 76×140 | 6.2 | 90×140 | 6.7 |
| 4700 | 35×80 | 4.6 | 50×100 | 4.8 | 65×100 | 6.2 | 65×120 | 5.7 | 76×120 | 6.3 | 90×140 | 7.4 | 90×140 | 7.4 |
| 5600 | 35×100 | 4.9 | 50×120 | 5.5 | 65×100 | 6.3 | 76×100 | 6.4 | 76×140 | 7.3 | 90×140 | 8.1 | 76×150 | 7.5 |
| 6800 | 35×120 | 5.5 | 65×100 | 6.3 | 65×120 | 7.3 | 76×120 | 7.6 | 90×140 | 8.9 | | | 76×150 | 8.9 |
| 8200 | 50×80 | 6.2 | 65×120 | 7.1 | 76×100 | 8.5 | 76×140 | 8.3 | | | | | | |
| 10000 | 50×100 | 6.7 | 76×100 | 7.9 | 76×120 | 9.5 | 90×140 | 9.9 | | | | | | |
| 12000 | 50×100 | 7.3 | 76×120 | 9.0 | 76×140 | 10.5 | 90×140 | 10.8 | | | | | | |
| 15000 | 50×120 | 8.6 | 76×140 | 11.3 | 90×140 | 12.5 | | | | | | | | |
| 18000 | 65×100 | 8.9 | 90×140 | 13.0 | 90×140 | 13.3 | | | | | | | | |
| 22000 | 65×120 | 10.3 | 90×140 | 14.3 | | | | | | | | | | |
| 27000 | 65×140 | 12.1 | | | | | | | | | | | | |
| 33000 | 76×120 | 14.1 | | | | | | | | | | | | |
| 39000 | 76×140 | 16.5 | | | | | | | | | | | | |
| 47000 | 76×140 | 18.3 | | | | | | | | | | | | |
| 56000 | 90×140 | 19.2 | | | | | | | | | | | | |
| 68000 | 90×140 | 20.1 | | | | | | | | | | | | |

(1)外形尺寸 Case Size D×L(mm)

(2)最大允许纹波电流 Max allowable ripple current (A rms +105°C,120Hz)

◆包装

Packaging

| 直径 Diameter (mm) | 泡沫卡直径 Foam card diameter (mm) | 高度 Height (mm) | 只/每盒 Pcs/box | 塑料袋尺寸 Plastic bag size (mm) | 外箱尺寸 Outsize box size (mm) |
|------------------------|-------------------------------------|----------------------|-----------------|-----------------------------------|----------------------------------|
| Φ50 | Φ56 | 80-100 | 16 只 | 185×180×0.07 | V-3(395X390X165) |
| Φ50 | Φ56 | 110-130 | 16 只 | 250×200×0.07 | V-2(395X390X195) |
| Φ50 | Φ56 | 140-150 | 16 只 | 250×200×0.07 | V-0(395X390X210) |

| 直径 Diameter (mm) | 泡沫卡直径 Foam card diameter (mm) | 高度 Height (mm) | 只/每盒 Pcs/box | 塑料袋尺寸 Plastic bag size (mm) | 外箱尺寸 Outsize box size (mm) |
|------------------------|-------------------------------------|----------------------|-----------------|-----------------------------------|----------------------------------|
| Φ65 | φ70 | 80-100 | 16 只 | 185×180×0.07 | V-3(395X390X165) |
| Φ65 | φ70 | 110-130 | 16 只 | 250×200×0.07 | V-2(395X390X195) |
| Φ65 | φ70 | 140-150 | 16 只 | 250×200×0.07 | V-0(395X390X210) |
| Φ76 | φ83 | 80-100 | 16 只 | 185×180×0.07 | V-3(395X390X165) |
| Φ76 | φ83 | 110-130 | 16 只 | 250×200×0.07 | V-2(395X390X195) |
| Φ76 | φ83 | 140-150 | 16 只 | 250×200×0.07 | V-0(395X390X210) |
| Φ90 | φ97 | 80-100 | 9 只 | 185×180×0.07 | V-3(395X390X165) |
| Φ90 | φ97 | 110-130 | 9 只 | 250×200×0.07 | V-2(395X390X195) |
| Φ90 | φ97 | 140-150 | 9 只 | 250×200×0.07 | V-0(395X390X210) |