

RHVL

Radial Lead Type
series

High Voltage, High Capacitance
Low ESR, High ripple current
Load life of 10,000h at 105°C



● Specifications

| Items | Characteristics | |
|------------------------------|--|--------------------------------------|
| Temperature range | -55 to +105°C | |
| Rated voltage range | 10 to 100Vdc | |
| Capacitance range | 10 to 1,500μF | |
| Capacitance tolerance | ±20% [M] (at 20°C, 120Hz) | |
| Tangent of loss angle | Less than or equal to the value of Standard Ratings (at 20°C, 120Hz) | |
| Leakage current | Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes) | |
| ESR | Less than or equal to the value of Standard Ratings | |
| Characteristics of impedance | $Z_{+105^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$, $Z_{-55^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ at 100kHz | |
| Endurance | 105°C, 10,000 hrs at rated voltage | |
| | Appearance | No significant damage |
| | Capacitance change | Within±20% of the initial value |
| | Tangent of loss angle (tanδ) | ≤150% of the initial specified value |
| | ESR(mΩ) | ≤150% of the initial specified value |
| | Leakage current | ≤The initial specified value |
| Damp Heat (Steady State) | 60°C, 90 to 95% RH, 1,000 hrs, No-applied Voltage | |
| | Appearance | No significant damage |
| | Capacitance change | Within±20% of the initial value |
| | Tangent of loss angle (tanδ) | ≤150% of the initial specified value |
| | ESR(mΩ) | ≤150% of the initial specified value |
| | Leakage current | ≤The initial specified value |
| Resistance to soldering heat | Flow method (260±5°C, 10s) | |
| | Appearance | No significant damage |
| | Capacitance change | Within±10% of the initial value |
| | Tangent of loss angle (tanδ) | ≤130% of the initial specified value |
| | ESR(mΩ) | ≤130% of the initial specified value |
| | Leakage current | ≤The initial specified value |

* In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

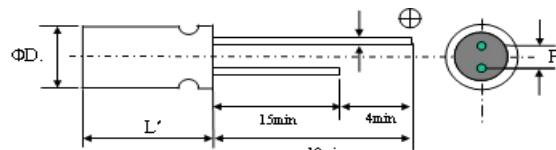
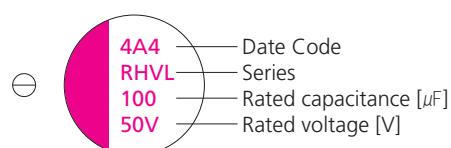
● Size List

(unit: mm)

| μF | RV (SV) | 16 (18.4) | 20 (23) | 25 (28.7) | 32 (36.8) | 35 (40.2) | 50 (57.5) |
|---------------|------------|--------------|------------|--------------|--------------|--------------|--------------|
| 10 | | | | | | 6.3×6 | |
| 18 | | | | | | 8×7 | |
| 22 | | | | 6.3×6 | 6.3×6 | 8×7 | |
| 39 | | | | | 8×7 | 8×11.5 | |
| 47 | | | 6.3×6 | | 8×7 | 8×11.5 | |
| 56 | | | 6.3×6 | | | 8×11.5 | |
| 68 | | | | 8×7 | 8×7 | 10×11.5 | |
| 82 | | | 8×7 | | 8×11.5 | | |
| 100 | | | 8×7 | | | 10×11.5 | |
| 120 | | 6.3×6 | | 8×11.5 | 10×11.5 | | |
| 150 | 6.3×6 | | | | 10×11.5 | | |
| 180 | 6.3×6 | 8×7 | 8×11.5 | | | | |
| 220 | | 8×11.5 | 8×11.5 | 10×11.5 | 10×11.5 | 10×11.5 | |
| 270 | 8×7 | | | | | | |
| 330 | | | 10×11.5 | | | | |
| 390 | | 8×11.5 | 10×11.5 | | | | |
| 470 | | | | | 10×11.5 | | |
| 560 | 8×11.5 | 10×11.5 | | | | | |
| 1000 | 10×11.5 | | | | | | |
| 1500 | 10×11.5 | | | | | | |

RV: Rated Voltage [V] SV: Surge Voltage [V] (at room temperature)

● Marking and Dimensions



| Size | $\text{ØD}\pm 0.5$ | L | L' | $P\pm 0.5$ | Ød |
|---------|--------------------|------|----------|------------|-------------|
| 6.3×6 | 6.3 | 6.0 | Lmax | 2.5 | 0.45 |
| 8×7 | | 7.0 | | 3.5 | 0.45 |
| 8×11.5 | 8.0 | 11.5 | L+1.0max | 3.5 | 0.60 |
| 10×11.5 | | 11.5 | | 5.0 | 0.60 |

● Standard Ratings

| Rated Voltage [Vdc] | Rated Capacitance [μ F] | Size ØD x L [mm] | ESR (20°C, 100kHz) [mΩ] [max.] | Rated Ripple Current (105°C, 100kHz) [mArms] | Tangent of Loss Angel [max.] | Leakage Current [μ A, max.] | Part Number |
|---------------------|------------------------------|------------------|--------------------------------|--|------------------------------|----------------------------------|----------------|
| 16 | 150 | 6.3 x 6 | 30 | 2590 | 0.12 | 480 | 16RHVL150MC6 |
| | 180 | 6.3 x 6 | 22 | 3300 | 0.12 | 576 | 16RHVL180MC6 |
| | 270 | 8 x 7 | 22 | 3300 | 0.12 | 864 | 16RHVL270MD7 |
| | 560 | 8 x 11.5 | 14 | 4950 | 0.12 | 1792 | 16RHVL560MD11 |
| | 1000 | 10 x 11.5 | 12 | 5400 | 0.12 | 3200 | 16RHVL1000ME11 |
| | 1500 | 10 x 11.5 | 12 | 5600 | 0.12 | 4800 | 16RHVL1500ME11 |
| 20 | 120 | 6.3 x 6 | 25 | 3200 | 0.12 | 480 | 20RHVL120MC6 |
| | 180 | 8 x 7 | 25 | 3200 | 0.12 | 720 | 20RHVL180MD7 |
| | 220 | 8 x 11.5 | 24 | 3320 | 0.12 | 880 | 20RHVL220MD11 |
| | 390 | 8 x 11.5 | 14 | 4950 | 0.12 | 1560 | 20RHVL390MD11 |
| | 560 | 10 x 11.5 | 12 | 5400 | 0.12 | 2240 | 20RHVL560ME11 |
| | 47 | 6.3 x 6 | 30 | 2800 | 0.12 | 235 | 25RHVL47MC6 |
| 25 | 56 | 6.3 x 6 | 30 | 2800 | 0.12 | 280 | 25RHVL56MC6 |
| | 82 | 8 x 7 | 28 | 3000 | 0.12 | 410 | 25RHVL82MD7 |
| | 100 | 8 x 7 | 28 | 3000 | 0.12 | 500 | 25RHVL100MD7 |
| | 180 | 8 x 11.5 | 16 | 4650 | 0.12 | 900 | 25RHVL180MD11 |
| | 220 | 8 x 11.5 | 16 | 4650 | 0.12 | 1100 | 25RHVL220MD11 |
| | 330 | 10 x 11.5 | 14 | 5000 | 0.12 | 1650 | 25RHVL330ME11 |
| 32 | 390 | 10 x 11.5 | 14 | 5000 | 0.12 | 1950 | 25RHVL390ME11 |
| | 22 | 6.3 x 6 | 35 | 2700 | 0.12 | 140 | 32RHVL22MC6 |
| | 68 | 8 x 7 | 25 | 3200 | 0.12 | 435 | 32RHVL68MD7 |
| | 120 | 8 x 11.5 | 20 | 4000 | 0.12 | 768 | 32RHVL120MD11 |
| | 220 | 10 x 11.5 | 18 | 4650 | 0.12 | 1408 | 32RHVL220ME11 |
| | 22 | 6.3 x 6 | 35 | 2600 | 0.12 | 154 | 35RHVL22MC6 |
| 35 | 39 | 8 x 7 | 30 | 2800 | 0.12 | 273 | 35RHVL39MD7 |
| | 47 | 8 x 7 | 30 | 2800 | 0.12 | 329 | 35RHVL47MD7 |
| | 68 | 8 x 7 | 28 | 3000 | 0.12 | 476 | 35RHVL68MD7 |
| | 82 | 8 x 11.5 | 20 | 4000 | 0.12 | 574 | 35RHVL82MD11 |
| | 120 | 10 x 11.5 | 18 | 4400 | 0.12 | 840 | 35RHVL120ME11 |
| | 150 | 10 x 11.5 | 18 | 4400 | 0.12 | 1050 | 35RHVL150ME11 |
| 50 | 220 | 10 x 11.5 | 18 | 4650 | 0.12 | 1540 | 35RHVL220ME11 |
| | 470 | 10 x 11.5 | 16 | 4950 | 0.12 | 3290 | 35RHVL470ME11 |
| | 10 | 6.3 x 6 | 40 | 2500 | 0.12 | 100 | 50RHVL10MC6 |
| | 18 | 8 x 7 | 35 | 2700 | 0.12 | 180 | 50RHVL18MD7 |
| | 22 | 8 x 7 | 35 | 2700 | 0.12 | 220 | 50RHVL22MD7 |
| | 39 | 8 x 11.5 | 25 | 3800 | 0.12 | 390 | 50RHVL39MD11 |
| | 47 | 8 x 11.5 | 25 | 3800 | 0.12 | 470 | 50RHVL47MD11 |
| | 56 | 8 x 11.5 | 25 | 3800 | 0.12 | 560 | 50RHVL56MD11 |
| | 68 | 10 x 11.5 | 20 | 4300 | 0.12 | 680 | 50RHVL68ME11 |
| | 100 | 10 x 11.5 | 20 | 4300 | 0.12 | 1000 | 50RHVL100ME11 |
| | 220 | 10 x 11.5 | 25 | 4650 | 0.12 | 2200 | 50RHVL220ME11 |

Conductive Polymer Hybrid
Aluminum Electrolytic Capacitors
Radial Lead Type

Conductive Polymer Hybrid
Aluminum Electrolytic Capacitors
SMD Lead Type

Conductive Polymer Aluminum
Electrolytic Capacitors_Radial Lead Type

Conductive Polymer Aluminum
Electrolytic Capacitors_SMD Lead Type