



Conductive Polymer Aluminum Solid Capacitor DR Cap

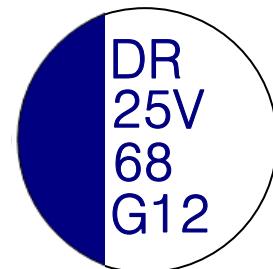
VV series

■ Features

- Low ESR at a high frequency range
- High ripple current capability
- Guaranteed at 105°C for 2000 hrs

■ Applications

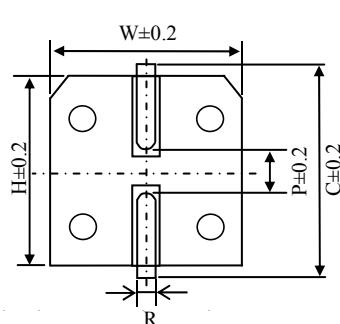
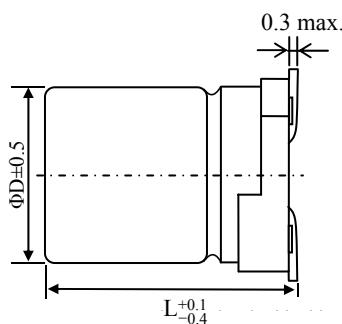
- SPS, D/D Converter, D/A Inverter
- MB, VGA, Navigator, Server
- PDP/LCD TV, LCD Monitor
- RoHS compliance and lead-free



Specifications

| Items | Characteristics | | | | | | | | | | |
|---|--|--|------------------------|--------------------|---|--------------------|---------------------------------------|-----|---------------------------------------|-----------------|-------------------------------|
| Category Temperature Range | -55 ~ +105°C | | | | | | | | | | |
| Rated Working Voltage Range | 20 ~ 35 Vdc | | | | | | | | | | |
| Nominal Capacitance Range | 6.8 ~ 330 μF | | | | | | | | | | |
| Capacitance Tolerance | ±20% (M) (120Hz , 20°C) | | | | | | | | | | |
| DC Leakage Current | Value in characteristics table (After rated voltage applied for 2 minutes) | | | | | | | | | | |
| Dissipation Factor (tanδ) | Value in characteristics table | | | | | | | | | | |
| ESR (100 K~300 KHz, 20°C) | Value in characteristics table | | | | | | | | | | |
| Temperature Characteristic Impedance Ratio at 100 KHz | -55°C +105°C | Z / Z _{20°C} Z / Z _{20°C} | 0.75~1.25 0.75~1.25 | | | | | | | | |
| Load Life (After 105°C, 2000 hrs, rated voltage applied) | <table border="1"> <tr> <td>Capacitance change</td><td>Within ±20% of the initial measured value</td></tr> <tr> <td>Dissipation Factor</td><td>Less than 150% of the specified value</td></tr> <tr> <td>ESR</td><td>Less than 150% of the specified value</td></tr> <tr> <td>Leakage Current</td><td>Less than the specified value</td></tr> </table> | | | Capacitance change | Within ±20% of the initial measured value | Dissipation Factor | Less than 150% of the specified value | ESR | Less than 150% of the specified value | Leakage Current | Less than the specified value |
| Capacitance change | Within ±20% of the initial measured value | | | | | | | | | | |
| Dissipation Factor | Less than 150% of the specified value | | | | | | | | | | |
| ESR | Less than 150% of the specified value | | | | | | | | | | |
| Leakage Current | Less than the specified value | | | | | | | | | | |
| Moisture Resistance (After 60°C, 90~95%RH, 1000 hrs, no voltage) | <table border="1"> <tr> <td>Capacitance change</td><td>Within ±20% of the initial measured value</td></tr> <tr> <td>Dissipation Factor</td><td>Less than 150% of the specified value</td></tr> <tr> <td>ESR</td><td>Less than 150% of the specified value</td></tr> <tr> <td>Leakage Current</td><td>Less than the specified value</td></tr> </table> <p>* Leakage Current should be tested after voltage treatment.</p> | | | Capacitance change | Within ±20% of the initial measured value | Dissipation Factor | Less than 150% of the specified value | ESR | Less than 150% of the specified value | Leakage Current | Less than the specified value |
| Capacitance change | Within ±20% of the initial measured value | | | | | | | | | | |
| Dissipation Factor | Less than 150% of the specified value | | | | | | | | | | |
| ESR | Less than 150% of the specified value | | | | | | | | | | |
| Leakage Current | Less than the specified value | | | | | | | | | | |
| Reverse Voltage Guarantee | Less than 10% of the rated voltage | | | | | | | | | | |

Dimensions (mm)



| Size Code | φ D | L W | | H | C | R | P |
|----------------|-----|-------------|-------------|-------------|------------|----------------|------------|
| C06 6.3 | | 6 | 6.6 | 6.6 | 7.3 | 0.5~0.8 | 2.1 |
| E07 8 | | 7 | 8.3 | 8.3 | 9 | 0.5~0.8 | 3.2 |
| E12 8 | | 12 | 8.3 | 8.3 | 9 | 0.8~1.1 | 3.2 |
| F12 10 | | 12.7 | 10.3 | 10.3 | 11 | 0.8~1.1 | 4.6 |



Table VV series Characteristics List

| Rated Voltage (V) | Nominal Capacitance (120Hz, 20°C) (μF) | Size Code | ϕ D | L | ESR (100K~300KHz) (mΩ) (max) | Max Ripple Current (100KHz, 105°C) (mA rms) | Leakage Current (μA) (max) | DF (tanδ) (120Hz, 20°C) (max) | Part Number |
|-------------------|--|-----------|-----|------|------------------------------|---|----------------------------|-------------------------------|---------------|
| 20 | 22 | C06 | 6.3 | 6 | 60 | 1450 | 88 | 0.10 | DRV0022M20C06 |
| | 27 C06 | | 6.3 | 6 | 60 | 1450 | 108 | 0.10 | DRV0027M20C06 |
| | 33 | E07 | 8 | 7 | 45 | 1890 | 132 | 0.12 | DRV0033M20E07 |
| | 47 E07 | | 8 | 7 | 45 | 1890 | 188 | 0.12 | DRV0047M20E07 |
| | 100 | E12 | 8 | 12 | 24 | 3320 | 400 | 0.15 | DRV0100M20E12 |
| | 150 F | | 12 | 12.7 | 20 | 4320 | 600 | 0.15 | DRV0150M20F12 |
| 25 | 6.8 | C06 | 6.3 | 6 | 80 | 1200 | 34 | 0.10 | DRV06R8M25C06 |
| | 10 C04 | | 6.3 | 4.2 | 60 | 1450 | 120 | 0.10 | DRV0010M25C04 |
| | 10 | C06 | 6.3 | 6 | 60 | 1500 | 120 | 0.10 | DRV0010M25C06 |
| | 22 C06 | | 6.3 | 6 | 50 | 2000 | 120 | 0.10 | DRV0022M25C06 |
| | 27 | C06 | 6.3 | 6 | 40 | 2100 | 135 | 0.10 | DRV0027M25C06 |
| | 33 E07 | | 8 | 7 | 30 | 2980 | 165 | 0.12 | DRV0033M25E07 |
| | 47 | C06 | 6.3 | 6 | 30 | 2500 | 235 | 0.12 | DRV0047M25C06 |
| | 68 E07 | | 8 | 7 | 45 | 2600 | 340 | 0.12 | DRV0068M25E07 |
| | 100 | E12 | 8 | 12 | 25 | 3320 | 500 | 0.12 | DRV0100M25E12 |
| 35 | 10 C06 | | 6.3 | 6 | 75 | 1500 | 70 | 0.12 | DRV0010M35C06 |
| | 15 | C06 | 6.3 | 6 | 75 | 1500 | 70 | 0.12 | DRV0015M35C06 |

Frequency coefficient for ripple current

| Frequency | 100Hz ≤ f < 1 KHz | 1 KHz ≤ f < 10 KHz | 10 KHz ≤ f < 100 KHz | 100 KHz ≤ f ≤ 500 KHz |
|-------------|-------------------|--------------------|----------------------|-----------------------|
| Coefficient | 0.05 | 0.3 | 0.7 | 1 |