



Conductive Polymer Aluminum Solid Capacitor DR Cap

DV series

■ Features

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



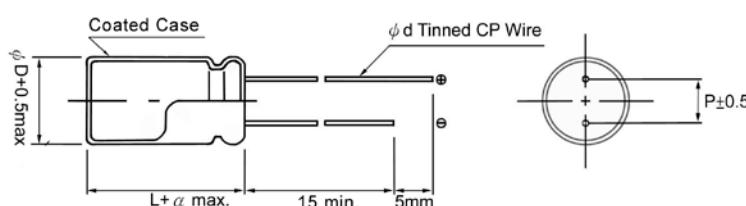
■ Applications

- 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 ~ 35Vdc		
Nominal Capacitance Range	10 ~ 220 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}	0.75~1.25 0.75~1.25
Load Life (After 105°C, 2000 hrs, rated voltage applied)	Capacitance change Dissipation Factor ESR Leakage Current	Within ±20% of the initial measured value Less than 150% of the specified value Less than 150% of the specified value Less than the specified value	
Moisture Resistance (After 60°C, 90~95% RH, 1000 hrs,no voltage)	Capacitance change Dissipation Factor ESR Leakage Current	Within ±20% of the initial measured value Less than 150% of the specified value Less than 150% of the specified value Less than the specified value	* Leakage Current should be tested after voltage treatment.
Reverse Voltage Guarantee	Less than 10% of the rated voltage		
Surge Voltage (In normal temperature , Protective resistor and discharge resistor : 1KΩ)	Cycle number : 1000cycles Charge : 30 ± 5 seconds , Discharge : 5.5 minutes Charge + Discharge = 6 ± 0.5 minutes (as 1 cycle) * The capacitors shall meet the following spec after 1000 cycles.		

Dimensions (mm)



Rated Voltage (V)	20	25	32	35
Surge Voltage (V)	23	25	32	35

Size Code	φD	L	α	P	φd
C04	6.3	4	0.5	2.5	0.45
C06	6.3	6	0.5	2.5	0.45
C11	6.3	11	1.0	2.5	0.5
E08	8	8	1.5	3.5	0.6
F12	10	12	1.5	5.0	0.6

The sum of DC voltage and the peak of ripple voltage must not exceed the rated voltage.



Table DV 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	150	F12	10	12	20	3640	600	0.12	DRDV0150M20F12
	180	F12	10	12	20	3640	720	0.12	DRDV0180M20F12
25	10	C06	6.3	6	60	1450	120	0.12	DRDV0010M25C06
	15	C04	6.3	4	60	1450	120	0.12	DRDV0015M25C04
	22	C06	6.3	6	40	2300	120	0.12	DRDV0022M25C06
	47	C06	6.3	6	40	2300	235	0.12	DRDV0047M25C06
	100	C11	6.3	11	25	2820	500	0.12	DRDV0100M25C11
	100	E08	8	8	30	2500	500	0.12	DRDV0100M25E08
	220	F12	10	12	20	4320	1100	0.12	DRDV0220M25F12
	470	F12	10	12	20	2700	2350	0.12	DRDV0470M25F12
32	120	F12	10	12	30	2820	768	0.12	DRDV0120M32F12
35	10	C06	6.3	6	60	1450	175	0.12	DRDV0010M35C06
	100	F12	10	12	30	2820	700	0.12	DRDV0100M35F12
	330	F12	10	12	50	2820	2310	0.12	DRDV0330M35F12
50	100	F12	10	12	27	3600	1000	0.12	DRDV0100M50F12

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