

# VD series

- Endurance: +105°C 2,000 hours
- High voltage
- Recommended Applications: Lamps and small LED power supply
- RoHS Compliant and lead-free



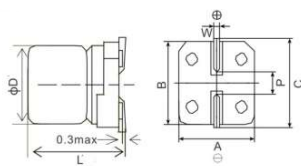
## SPECIFICATIONS

Items	Characteristics			
Category Temperature Range	-55~+105°C			
Rated Working Voltage Range	35~63 V <sub>dc</sub>			
Nominal Capacitance Range	22~470μF			
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)			
DC Leakage Current	I ≤ 0.2CV or 500μA, whichever is greater. Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)			
Dissipation Factor (tanδ)	Rated Voltage (V <sub>dc</sub> )	35	50	63
	tanδ (max.)	0.12 (at 20°C, 120Hz)		
ESR(100kHz, 20°C)	Value in characteristics table			
Temperature Characteristic (Impedance Ratio at 100kHz)	Z(+105°C)/Z(+20°C) ≤ 1.25 Z(-55°C)/Z(+20°C) ≤ 1.25			
Endurance	After applying rated voltage for 2,000 hours at 105°C, the capacitors shall meet the following requirements.			
	Appearance	No significant damage		
	Capacitance Change	≤ ±20% of the initial value		
	D.F. (tanδ)	≤ 150% of the initial specified value		
	ESR	≤ 150% of the initial specified value		
Humidity Test	After subjecting to 90~95% RH for 2,000 hours at 60°C without voltage applied, the capacitors shall meet the specified values for the Endurance characteristics listed above.			
	After subjecting to 1,000 cycles each consisting of charge with the surge voltage specified at normal temperature for 30 seconds through a protective resistor and discharge for 5 minutes 30 seconds, the capacitors shall meet the following requirements.			
	Appearance	No significant damage		
	Capacitance Change	≤ ±20% of the initial value		
	D.F. (tanδ)	≤ 150% of the initial specified value		
Surge Test	ESR	≤ 150% of the initial specified value		
	Leakage Current	≤ The initial specified value		

Conductive Polymer SMD Type

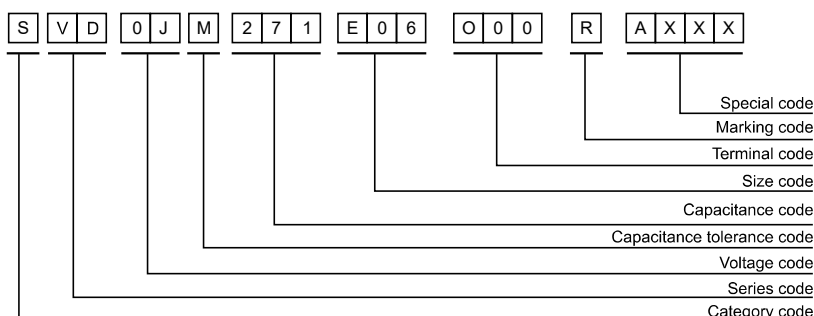
\*Note: If any doubt arises, measure the leakage current after the following voltage treatment.  
Voltage treatment: DC rated voltage is applied to the capacitors for 120 minutes at 105°C.

## DIMENSIONS [mm]



	D	6.3	8	10
P±0.2	1.9	3.1	4.5	
A±0.2	6.6	8.3	10.3	
B±0.2	6.6	8.3	10.3	
C±0.2	7.2	9.0	11.0	
W	0.5~0.8	0.7~1.1	0.7~1.1	
ØD'	ØD-0.1~+0.5	ØD-0.1~+0.5	ØD-0.1~+0.5	
L'	L±0.5	L±0.3	L±0.3	

## PART NUMBERING SYSTEM



**VD series**

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size ΦDxL(mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (mA rms/105°C, 100kHz)	Leakage Current (μA)(max.)	Part Number
35 (40.3)	22	6.3×6	54	1100	500	SVD1VM220E06E00RAXXX
	27	6.3×6	54	1100	500	SVD1VM270E06E00RAXXX
	33	6.3×6	54	1100	500	SVD1VM330E06E00RAXXX
	47	6.3×9	45	1500	500	SVD1VM470E09E00RAXXX
		6.3×6	40	1100	500	SVD1VM470E06E00RAXXX
	68	6.3×6	40	1100	500	SVD1VM680E06E00RAXXX
		6.3×9	36	1800	500	SVD1VM680E09E00RAXXX
	100	6.3×9	36	2200	700	SVD1VM101E09E00RAXXX
		8×9.5	36	2900	700	SVD1VM101F9RE00RAXXX
		8×11.5	27	3100	700	SVD1VM101FBRE00RAXXX
		8×11.5	27	3100	1050	SVD1VM151FBRE00RAXXX
	220	8×11.5	27	2500	1540	SVD1VM221FBRE00RAXXX
	270	8×11.5	27	2600	1890	SVD1VM271FBRE00RAXXX
		10×12.5	27	2800	1890	SVD1VM271GCRE00RAXXX
330	10×12.5	27	2800	2310	SVD1VM331GCRE00RAXXX	
470	10×12.5	27	3100	3290	SVD1VM471GCRE00RAXXX	
50 (57.5)	22	6.3×6	72	840	500	SVD1HM220E06E00RAXXX
	33	6.3×6	72	890	500	SVD1HM330E06E00RAXXX
	47	6.3×9	54	1400	500	SVD1HM470E09E00RAXXX
	68	8×11.5	27	2100	680	SVD1HM680FBRE00RAXXX
	82	10×12.5	27	2100	820	SVD1HM820GCRE00RAXXX
		8×11.5	27	2100	820	SVD1HM820FBRE00RAXXX
	100	8×9.5	54	1500	1000	SVD1HM101F9RE00RAXXX
		8×11.5	27	2100	1000	SVD1HM101FBRE00RAXXX
		10×12.5	27	2200	1000	SVD1HM101GCRE00RAXXX
	120	8×11.5	27	2100	1200	SVD1HM121FBRE00RAXXX
	150	10×12.5	27	2200	1500	SVD1HM151GCRE00RAXXX
	220	10×12.5	27	2400	2200	SVD1HM221GCRE00RAXXX
63 (72.5)	22	6.3×6	72	520	500	SVD1JM220E06E00RAXXX
	33	6.3×9	54	520	500	SVD1JM330E09E00RAXXX
	47	8×9.5	54	1000	592	SVD1JM470F9RE00RAXXX
	56	8×11.5	36	1000	706	SVD1JM560FBRE00RAXXX
	100	10×12.5	36	1600	1260	SVD1JM101GCRE00RAXXX

※ Specifications subject to change without notice.