VH series

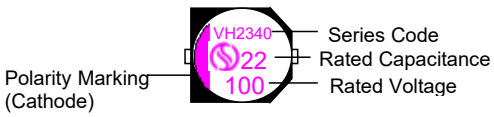
- Low ESR,High Voltage ,High ripplie current capability
- Rated voltage :35~100V
- Endurance:2,000hours at 105℃
- Applications: LED Drver,LED Power Supply etc.
- ROHS compliant
- Halogen Free compliant

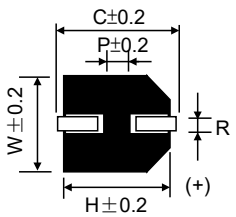
SPECIFICATIONS

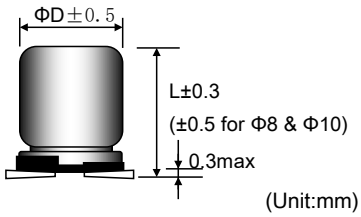
Items	Conditions	Characteristics	
Category Temperature Range	—	-55 to +105℃	
Rated Voltage Range	—	35 ~ 100V	
Capacitance Tolerance	at 20℃,120Hz	±20%(M)	
Surge Voltage	at 105℃	Rated voltage ×1.15V	
Leakage Current	at 20℃ after 2 minutes	I ≦ 0.2CV or 300(μA) Whichever is greater measured,after 2 minutes application of rated working voltage at +20℃. Please see the attached characteristics list	
Dissipation Factor (tan δ)	at 20℃,120Hz	Please see the attached characteristics list	
Low Temperature Characteristics (Max. Impedance Ratio)	at -55℃,100kHz	Z(-55℃)/Z(+20℃)	≦ 1.25
	at -25℃,100kHz	Z(-25℃)/Z(+20℃)	≦ 1.15
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 hours at 105℃.	Appearance	No significant damage.
		Capacitance change	≦ ±20% of the initial value.
		DF (tan δ)	≦ 150% of the initial specified value.
		ESR	≦ 150% of the initial specified value.
		Leakage current	≦ The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to store at 60℃, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance	No significant damage.
		Capacitance change	≦ ±20% of the initial value.
		DF (tan δ)	≦ 150% of the initial specified value.
		ESR	≦ 150% of the initial specified value.
		Leakage current	≦ The initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 105℃ for 30 seconds through aprotective resistor (R =1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance	No significant damage.
		Capacitance change	≦ ±20% of the initial value.
		DF (tan δ)	≦ 150% of the initial specified value.
		ESR	≦ 150% of the initial specified value.
		Leakage current	≦ The initial specified value.

※ Note：If any doubt arises, measure the leakage current after following voltage treatment.
Voltage treatmen：DC rated voltage are applied to the capacitors for 120 minutes at 105℃.

MARKING AND DIMENSIONS







(Unit:mm)

ΦDxL	ΦD	L	W	H	C	R	P
6.3×5.8	6.3	5.8	6.6	6.6	7.3	0.6~0.9	2.1
6.3×9.5	6.3	9.5	6.6	6.6	7.3	0.6~0.9	2.1
8×6.7	8.0	6.7	8.3	8.3	9.0	0.8~1.1	3.2
8×9.5	8.0	9.5	8.3	8.3	9.0	0.8~1.1	3.2
8×12	8.0	12.0	8.3	8.3	9.0	0.8~1.1	3.2
10×10.5	10.0	10.5	10.3	10.3	11.0	0.8~1.1	4.6
10×12.5	10.0	12.5	10.3	10.3	11.0	0.8~1.1	4.6

VH series

STANDARD RATINGS

Rated Voltage (S.V.)	Cap (μF)	Size Code DxL	Leakage current (μA) max.	ESR (mΩ) max. 100k to 300kHz / 20℃	Rated Ripple Current (mA rms) 100kHz / 105℃	D.F. (tanδ) max. 120Hz / 20℃
35 (40.3)	22	6.3x5.8	300	80	1450	0.12
	56	6.3x9.5	392	50	2300	0.12
	68	6.3x9.5	476	50	2300	0.12
	68	8x6.7	476	60	2500	0.12
	100	8x12	700	28	2750	0.12
	220	10x12.5	1540	28	3200	0.12
50 (57.5)	12	6.3x5.8	300	100	1450	0.12
	33	6.3x9.5	330	50	1800	0.12
	47	8x9.5	470	45	2100	0.12
	100	10x12.5	1000	28	2560	0.12
	180	10x12.5	1800	28	2750	0.12
63 (72.5)	22	6.3x9.5	300	50	1800	0.12
	33	6.3x9.5	416	50	1800	0.12
	47	8x12	592	36	2200	0.12
	56	10x10.5	705	32	2350	0.12
	100	10x12.5	1260	28	2550	0.12
	150	10x12.5	1890	28	2550	0.12
80 (92.0)	22	8x9.5	352	45	2100	0.12
	33	8x12	528	45	2100	0.12
	47	10x10.5	752	45	2250	0.12
	68	10x12.5	1088	38	2550	0.12
100 (115.0)	15	8x12	300	40	2050	0.12
	22	10x12.5	440	38	2250	0.12
	27	10x12.5	540	38	2250	0.12

FREQUENCY COEFFICIENT FOR RIPPLE CURRENT

Frequency	120Hz ≦ f < 1kHz	1kHz ≦ f < 10kHz	10kHz ≦ f < 100kHz	100kHz ≦ f < 500kHz
Coefficient	0.05	0.3	0.7	1.0