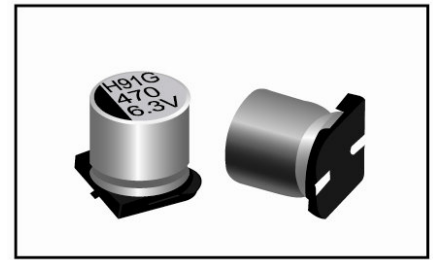
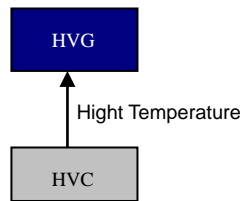


- Chip Type ,Higher Temperature 125°C,1000 hours.
- Low ESR ,high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant



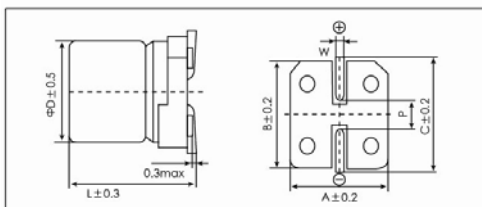
Items	Characteristics
Operating Temperature Range(°C)	-55~+125
Voltage Range (V)	2.5~20
Capacitance Range(μF)(20°C,120Hz)	22~1000
Capacitance Tolerance (20°C,120Hz)	±20%
Surge Voltage	$U_R \times 1.15$
Leakage Current (μA)※1	Please see attached ratings list (20°C,2min)
Dissipation Factor (20°C,120Hz)	Please see attached ratings list
Equivalent Series Resistance(20°C,100kHz)	Please see attached ratings list
Temperature Characteristics(Max Impedance Ratio at 100kHz)	$Z(+125^\circ\text{C})/Z(+20^\circ\text{C}): \leq 1.25$ $Z(-55^\circ\text{C})/Z(+20^\circ\text{C}): \leq 1.25$
Endurance	<b>1000h, Rated voltage applied at 125°C</b> Capacitance change: within ±20% of the initial measured value Dissipation Factor (Tan δ): ≤200% of initial specified value ESR: ≤200% of initial specified value DC Leakage Current: ≤the initial specified value
Damp heat(Steady state)	<b>1000h, No-applied voltage 60°C, 90~95% RH</b> Capacitance change: within ±20% of the initial measured value Dissipation Factor (Tan δ): ≤150% of initial specified value ESR: ≤150% of initial specified value DC Leakage Current: ≤the initial specified value(after voltage processing)
Resistance to soldering heat	<b>Reflow method (260°C × 5s)</b> Capacitance change: within ±10% of the initial measured value Dissipation Factor (Tan δ): ≤130% of initial specified value ESR: ≤130% of initial specified value DC Leakage Current: ≤the initial specified value(after voltage processing)

※ 1 In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 125°C.

## Dimensions

mm

(unit:Mm)



Size Code	φD±0.5	L	A±0.2	B±0.2	C±0.2	W	P±0.2
F60	6.3	5.7	6.6	6.6	7.3	0.5 ~ 0.8	2.0
B70	8	6.7	8.3	8.3	9.0	0.5 ~ 0.8	3.1
C80	10	7.7	10.3	10.3	11.0	0.7 ~ 1.1	4.6

## Size List

UR[S.V](V) Cap.(μF)	2.5[2.9]	4[4.6]	6.3 [7.2 ]	10[12 ]	16 [18 ]	20 [23 ]
22						F60
39					F60	
47						B70
56				F60		
82			F60		B70	C80
100			F60			
120				B70		
150		F60	B70	B70	C80	
180					C80	
220	F60	B70	B70			
330				C80		
470			C80			
560	B70					
680		C80				
1,000	C80					

## Ratings for HVG Series

U <sub>R</sub> Code	Rated Capacitance 20°C, 120Hz	Max ESR 20°C, 100kHz	Allowable Ripple Current 100kHz, T≤105°C	Rated Ripple Current 100kHz, 105°C<T≤125°C	Dissipation Factor 20°C, 120Hz	Leakage Current 20°C,2min	Size φ D×L	P/N
(v)	(μF)	(mΩ)	(mA <sub>RMS</sub> )	(mA <sub>RMS</sub> )	(%)	(μA)	(mm)	-
2.5 0E	220	35	2,500	770	12	110.0	6.3x5.7	PCV0EVG221MF60□□
	560	30	3,100	960	12	280.0	8x6.7	PCV0EVG561MB70□□
	1,000	25	3,700	1,100	12	500.0	10x7.7	PCV0EVG102MC80□□
4 0G	150	35	2,450	770	12	120.0	6.3x5.7	PCV0GVG151MF60□□
	220	30	3,020	960	12	176.0	8x6.7	PCV0GVG221MB70□□
	680	25	3,700	1,100	12	544.0	10x7.7	PCV0GVG681MC80□□
6.3 0J	82	40	2,400	720	12	103.0	6.3x5.7	PCV0JVG820MF60□□
	100	40	2,400	720	12	126.0	6.3x5.7	PCV0JVG101MF60□□
	150	30	3,020	960	12	189.0	8x6.7	PCV0JVG151MB70□□
	220	30	3,020	960	12	277.0	8x6.7	PCV0JVG221MB70□□
	470	25	3,700	1,100	12	592.0	10x7.7	PCV0JVG471MC80□□
10 1A	56	45	2,250	680	12	112.0	6.3x5.7	PCV1AVG560MF60□□
	120	35	2,800	880	12	240.0	8x6.7	PCV1AVG121MB70□□
	150	35	2,800	880	12	300.0	8x6.7	PCV1AVG151MB70□□
	330	30	3,700	1,010	12	660.0	10x7.7	PCV1AVG331MC80□□
16 1C	39	50	2,050	650	12	125.0	6.3x5.7	PCV1CVG390MF60□□
	82	40	2,700	830	12	262.0	8x6.7	PCV1CVG820MB70□□
	150	35	3,020	930	12	480.0	10x7.7	PCV1CVG151MC80□□
	180	35	3,020	930	12	576.0	10x7.7	PCV1CVG181MC80□□
20 1D	22	60	1,650	590	12	88.0	6.3x5.7	PCV1DVG220MF60□□
	47	45	2,000	780	12	188.0	8x6.7	PCV1DVG470MB70□□
	82	45	2,400	820	12	328.0	10x7.7	PCV1DVG820MC80□□

Customer products are available on request.

## 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