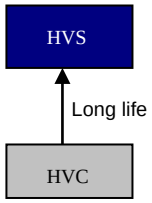
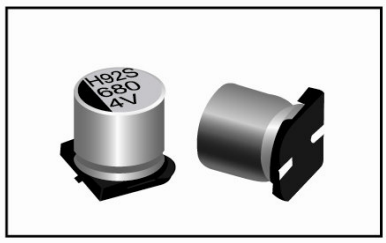
HVS SERIES

- Chip Type ,Long Life 105℃,5000 hours.
- Low ESR ,high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant



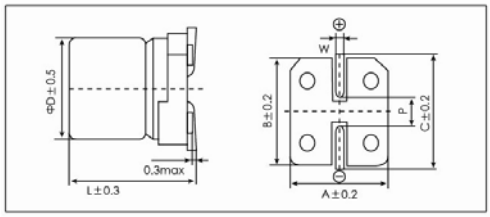


Items	Characteristics
Operating Temperature Range(°C)	-55~+105
Voltage Range (V)	4~25
Capacitance Range(μF)(20°C,120Hz)	10~470
Capacitance Tolerance (20°C,120Hz)	±20%
Surge Voltage	U_R×1.15
Leakage Current (μA)※1	Please see attached ratings list (20℃,2min)
Dissipation Factor (20°C,120Hz)	Please see attached ratings list
Equivalent Series Resistance(20°C,100kHz)	Please see attached ratings list
Temperature Characteristics(Max Impedance Ratio at 100kHz)	Z (+105℃)/Z (+20℃): ≤1.25 Z (-55℃)/Z (+20℃): ≤1.25
Endurance	**5000h,Rated voltage applied at 105℃** 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 Currrent: ≤the initial specified value
Damp heat(Steady state)	**1000h,No-applied voltage 60℃,90~95% RH** Capacitance change:within±20% of the initialMeasured value Dissipation Factor (Tan δ): ≤150% of initial specified value ESR: ≤150% of initial specified value DC Leakage Currrent: ≤the initial specified value(after voltage processing)
Resistance to soldering heat	**Reflow Method (260℃×5s)** 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 Currrent: ≤the initial specified value(after voltage processing)

※ 1 In case of some problems for Measured values, Measure after applying rated voltage for120 minutes at 105℃.

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)	4[4.6]	6.3 [7.2]	10[12]	16 [18]	20 [23]	25[29]
10						F60
22					F60	
39				F60		
47					B70	
68			F60	F60		
82				B70		
100				C80		
120		F60	F60	B70		
150	F60		B70,C80			
180				C80		
220		F60,B70				
270	B70					
330			C80			
390		B70				
470		C80				
560	B70					
680	C80					

Ratings for HVS Series

U_R Code	Rated Capacitance 20℃, 120Hz	Max ESR 20℃, 100kHz	Rated Ripple Current 105℃, 100kHz	Dissipation Factor 20℃, 120Hz	Leakage Current 20℃,2min	Size ΦD×L	P/N
(v)	(μF)	(mΩ)	(mArms)	(%)	(μA)	(mm)	-
4 0G	150	22	2,570	12	120.0	6.3X5.7	PCV0GSV151MF60□□
	270	22	3,220	12	216.0	8X6.7	PCV0GSV271MB70□□
	560	22	3,220	12	448.0	8X6.7	PCV0GSV561MB70□□
	680	20	4,130	12	544.0	10X7.7	PCV0GSV681MC80□□
6.3 0J	120	22	2,570	12	151.2	6.3X5.7	PCV0JSV121MF60□□
	220	22	2,570	12	277.2	6.3X5.7	PCV0JSV221MF60□□
	220	22	3,220	12	277.2	8X6.7	PCV0JSV221MB70□□
	390	22	3,220	12	491.4	8X6.7	PCV0JSV391MB70□□
	470	20	4,130	12	592.2	10X7.7	PCV0JSV471MC80□□
10 1A	68	30	2,200	12	136.0	6.3X5.7	PCV1ASV680MF60□□
	120	27	2,320	12	240.0	6.3X5.7	PCV1ASV121MF60□□
	150	30	2,760	12	300.0	8X6.7	PCV1ASV151MB70□□
	150	30	3,020	12	300.0	10X7.7	PCV1ASV151MC80□□
	330	24	3,770	12	660.0	10X7.7	PCV1ASV331MC80□□
16 1C	39	37	2,050	12	124.8	6.3X5.7	PCV1CSV390MF60□□
	68	30	2,200	12	217.6	6.3X5.7	PCV1CSV680MF60□□
	82	30	2,760	12	262.4	8X6.7	PCV1CSV820MB70□□
	120	27	2,900	12	384.0	8X6.7	PCV1CSV121MB70□□
	100	35	2,670	12	320.0	10X7.7	PCV1CSV101MC80□□
	180	29	3,430	12	576.0	10X7.7	PCV1CSV181MC80□□
20 1D	22	60	1,450	10	88.0	6.3X5.7	PCV1DSV220MF60□□
	47	45	1,890	12	188.0	8X6.7	PCV1DSV470MB70□□
25 1E	10	60	1,500	10	125.0	8X6.7	PCV1ESV100MB70□□

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