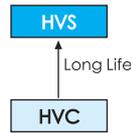


- Chip Type, Long Life 105°C, 5000 hours
- Low ESR, high ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant



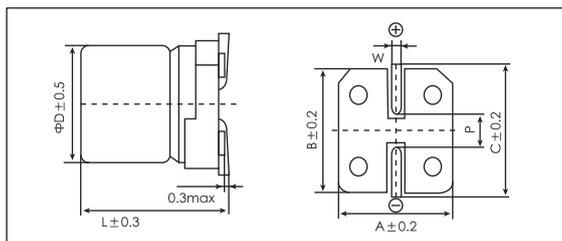
Items	Characteristics
Operating Temperature Range (°C)	-55 ~ +105
Voltage Range (V)	4 ~ 25
Capacitance Range (μF) (20°C, 120Hz)	10 ~ 560
Capacitance Tolerance (20°C, 120Hz)	± 20%
Surge Voltage	$U_R \times 1.15$
Leakage Current (μA) ※1	Please see the attached ratings list (20°C, 2min)
Dissipation Factor (20°C, 120Hz)	Please see the attached ratings list
Equivalent Series Resistance (20°C, 100kHz)	Please see the attached ratings list
Temperature Characteristics (Max Impedance Ratio at 100kHz)	$Z_{+105^\circ\text{C}} / Z_{+20^\circ\text{C}} \leq 1.25$ $Z_{-55^\circ\text{C}} / Z_{+20^\circ\text{C}} \leq 1.25$
Endurance	5000h, Rated voltage applied at 105°C 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
Damp heat(Steady state)	1000h, No-applied voltage 60°C, 90~95% RH 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	Reflow method (260°C × 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 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 105°C.

Dimensions

mm

Size list



(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
B12	8	12.2	8.3	8.3	9.0	0.7~1.1	3.1

Cap.(μF) \ U _R [S.V] (V)	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						
120		F60	F60	B70		
150	F60		B70			
180						
220		F60.B70				
270	B70			B12		
330						
390		B70				
470						
560	B70					

Ratings for HVS Series

U _r Code	Rated Capacitance 20°C,120Hz	Max ESR 20°C,100kHz	Rated Ripple Current 105°C,100kHz	Dissipation Factor 20°C,120Hz	Leakage Current 20°C,2min	Size Φ D x L	P/N
(V)	(μF)	(mΩ)	(mA _{rms})	(%)	(μA)	(mm)	-
4 0G	150	22	2570	12	120.0	6.3×5.7	PCV0GSV151MF60□□
	270	22	3220	12	216.0	8×6.7	PCV0GSV271MB70□□
	560	22	3220	12	448.0	8×6.7	PCV0GSV561MB70□□
6.3 0J	120	22	2570	12	151.2	6.3×5.7	PCV0JSV121MF60□□
	220	22	2570	12	277.2	6.3×5.7	PCV0JSV221MF60□□
	220	22	3220	12	277.2	8×6.7	PCV0JSV221MB70□□
	390	22	3220	12	491.4	8×6.7	PCV0JSV391MB70□□
10 1A	68	30	2200	12	136.0	6.3×5.7	PCV1ASV680MF60□□
	120	27	2320	12	240.0	6.3×5.7	PCV1ASV121MF60□□
	150	30	2760	12	300.0	8×6.7	PCV1ASV151MB70□□
16 1C	39	37	2050	12	124.8	6.3×5.7	PCV1CSV390MF60□□
	68	30	2200	12	217.6	6.3×5.7	PCV1CSV680MF60□□
	82	30	2760	12	262.4	8×6.7	PCV1CSV820MB70□□
	120	27	2900	12	384.0	8×6.7	PCV1CSV121MB70□□
	270	14	4350	12	864.0	8×12.2	PCV1CSV271MB12□□
20 1D	22	60	1450	10	88.0	6.3×5.7	PCV1DSV220MF60□□
	47	45	1890	12	188.0	8×6.7	PCV1DSV470MB70□□
25 1E	10	60	1500	10	125.0	6.3×5.7	PCV1ESV100MB60□□

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