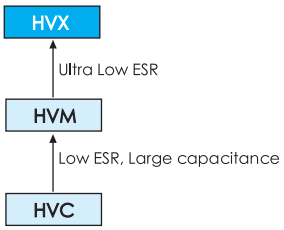
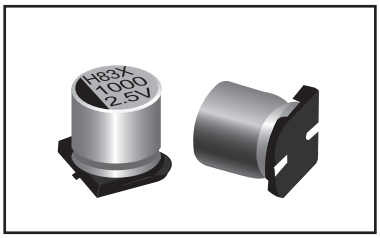
HVX SERIES

- Chip Type, Ultra Low ESR 105℃, 2000 hours
- High ripple current capability
- Applications: DC/DC Converter, Switching Power Supply, Back up Power Supplies for CPU etc.
- RoHS Compliant

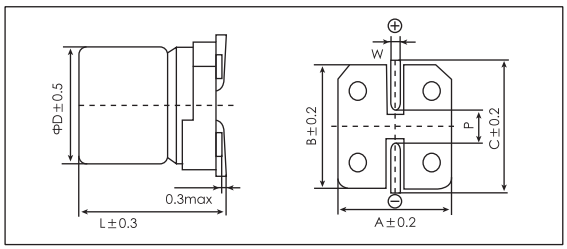




Items	Characteristics
Operating Temperature Range (℃)	-55 ~ +105
Voltage Range (V)	2.5 ~ 10
Capacitance Range (μF) (20℃, 120Hz)	120 ~ 680
Capacitance Tolerance (20℃, 120Hz)	± 20%
Surge Voltage	U_R x 1.15
Leakage Current (μA) ※1	Please see the attached ratings list (20℃, 2min)
Dissipation Factor (20℃, 120Hz)	Please see the attached ratings list
Equivalent Series Resistance (20℃, 100kHz)	Please see the attached ratings list
Temperature Characteristics (Max Impedance Ratio at 100kHz)	$Z_{+105℃} / Z_{+20℃} \leqslant 1.25$ $Z_{-55℃} / Z_{+20℃} \leqslant 1.25$
Endurance	**2000h, 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 Current: ⩽ the initial specified value
Damp heat(Steady state)	**1000h, No-applied voltage 60℃, 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℃×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℃.

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

Size list

Cap.(μF) \ U_R[S.V] (V)	2.5 [2.9]	4 [4.6]	6.3 [7.2]	10 [12]
120				F60
220			F60	B70
270				B70
330		F60	B70	B70
390	F60	F80	B70	
470		B70	B70	
560	B70	B70		
680	B70			

Ratings for **HVX** 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 x L	P/N
(V)	(μF)	(mΩ)	(mArms)	(%)	(μA)	(mm)	-
2.5 0E	390	11	3900	12	195	6.3×5.7	PCV0EVX391MF60□□
	560	11	4500	12	280	8×6.7	PCV0EVX561MB70□□
	680	11	4500	12	340	8×6.7	PCV0EVX681MB70□□
4 0G	330	11	3900	12	264	6.3×5.7	PCV0GVX331MF60□□
	390	11	3900	12	312	6.3×7.7	PCV0GVX391MF80□□
	470	11	4500	12	376	8×6.7	PCV0GVX471MB70□□
	560	11	4500	12	448	8×6.7	PCV0GVX561MB70□□
6.3 0J	220	11	3900	12	277	6.3×5.7	PCV0JVX221MF60□□
	330	11	4500	12	415.8	8×6.7	PCV0JVX331MB70□□
	390	11	4500	12	491.4	8×6.7	PCV0JVX391MB70□□
	470	11	4500	12	592.2	8×6.7	PCV0JVX471MB70□□
10 1A	120	15	3200	12	240	6.3×5.7	PCV1AVX121MF60□□
	220	15	3800	12	440	8×6.7	PCV1AVX221MB70□□
	270	15	3800	12	540	8×6.7	PCV1AVX271MB70□□
	330	15	3800	12	660	8×6.7	PCV1AVX331MB70□□

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