

## *Data Sheet*

Customer: \_\_\_\_\_

Product: SMD Aluminum Electrolytic Capacitors – EHV Series

Size : 4x5.7mm ~ 18x21.5mm

Issued Date: 19-Jun-2024

Edition: Ver. 5

### Record of change

Date	Ver.	Description	Page
15-May-2016	1		
22-Nov-2016	2	Revised DF and RC on some case sizes	1,2
26-Jul-2022	3	I size Revise 16x17mm	2
05-Oct-2023	4	Add item	2
19-Jun-2024	5	Update size	2

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Prepared by	Checked by	Approved by	Accepted by (customer)
19-Jun-2024	19-Jun-2024	19-Jun-2024	
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- SMD TYPE Reflow Soldering is available
- Life 2000 hours at 105°C
- Available For High Density Mounting

**Characteristics**

<b>Temperature Range</b>	6.3 ~ 100V			160 ~ 400V				450V				
	-55°C ~ +105°C			-40°C ~ +105°C				-25°C ~ +105°C				
<b>Capacitance Tolerance</b>	±20% (at 20°C, 120Hz)											
<b>Leakage Current</b>	SIZE A~F: I≤0.01CV or 3uA, whichever is greater 2 minutes after Rated Voltage applied SIZE G~L(6.3V~100V): I≤0.03CV whichever is greater 2 minutes after Rated Voltage applied SIZE G~L(160V~450V): I≤0.04CV +100uA whichever is greater 5 minutes after rated voltage applied											
<b>Dissipation Factor (tanδ)Max</b> (at 20°C, 120Hz)	Voltage (V)	6.3	10	16	25	35	50	63	100	160~250	400~450	
	SIZE A~C	0.30	0.24	0.20	0.16	0.14	0.14	0.12	0.10	-	-	
	SIZE D~F	0.35	0.26	0.24	0.18	0.14	0.14	0.12	0.10	0.20	0.25	
	SIZE G~L	0.40	0.38	0.34	0.26	0.22	0.18	0.14	0.10	0.20	0.25	
When the capacitance exceeds 1,000uF, 0.02 shall be added every 1,000uF increase.												
<b>Stability at Low Temperature</b> (at 120Hz)	Voltage (V)		6.3	10	16	25	35	50	63	100	160~250	400~450
	Z -25°C	SIZE A~F	4	4	3	2	2	2	2	3	-	-
	/Z +20°C	SIZE G~L	5	4	3	2	2	2	2	2	3	6
	Z -40°C	SIZE A~F	12	8	6	4	3	3	3	4	-	-
/Z 20°C	SIZE G~L	10	8	6	4	3	3	3	3	6	10	
<b>Load Life</b>	After the rated voltage has been applied for 2000 hours at 105°C		Capacitance change	Within ±25% of initial value								
			D.F. tanδ	Less than ±300% of specified value								
			Leakage current	Less than Initial specified value								
<b>Shelf Life</b>	After storage for 1000 hours at 105°C, with no voltage applied and being stabilized at +20°C, Capacitor shall meet the limit specified in load life.(Refer to JIS C5101-4 4.1)											

**Diagram of dimensions**

SIZE	Dφ	L	A	B	C	W	P±0.2
A	4	5.7±0.3	4.3	4.3	5.1	0.5~0.8	1.0
B	5	5.7±0.3	5.3	5.3	6.1	0.5~0.8	1.3
C	6.3	5.7±0.3	6.6	6.6	7.3	0.5~0.8	2.2
C8	6.3	7.7±0.3	6.6	6.6	7.3	0.5~0.8	2.2
D	8	6.5±0.5	8.3	8.3	9.2	0.7~1.2	3.2
E	8	10.5±0.5	8.3	8.3	9.2	0.7~1.2	3.2
F	10	10.5±0.5	10.3	10.3	11.2	0.7~1.2	4.4
G	12.5	13.5±0.5	13.0	13.0	14.0	1.0~1.4	4.4
H	12.5	16±0.5	13.0	13.0	14.0	1.0~1.4	4.4
I	16	17±0.5	17.0	17.0	18.0	1.1~1.4	6.6
J	16	21.5±0.5	17.0	17.0	18.0	1.1~1.4	6.4
K	18	16.5±0.5	19.0	19.0	20.0	1.1~1.4	6.4
L	18	21.5±0.5	19.0	19.0	20.0	1.1~1.4	6.4

Fig. 1

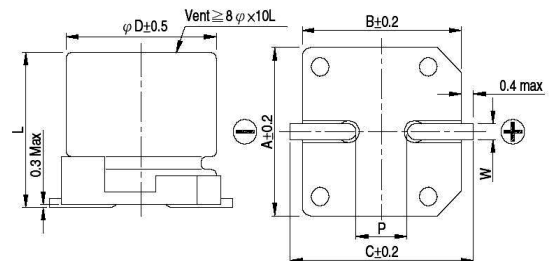
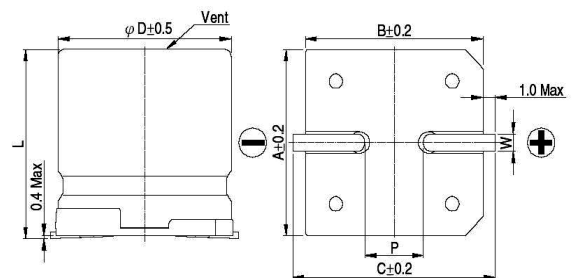


Fig. 2



Size A~F refer to Fig. 1,

Size G~L refer to Fig. 2

**Multiplier for Ripple Current vs Frequency**

CAP(uF)\Freq(Hz)	60(50)	120	500	1K	≥10K
0.1 ≤ CAP ≤ 100	0.8	1.0	1.20	1.30	1.50
100 < CAP	0.8	1.0	1.10	1.15	1.20

**Case size & Maximum Ripple Current (mA rms 105°C 120Hz)**

Cap. \ WV	6.3		10		16		25		35		50	
uF	Size	RC	Size	RC	Size	RC	Size	RC	Size	RC	Size	RC
1											A	7
2.2											A	11
3.3											A	14
4.7							A	13	A	15	A,B	16/19
10					A	18	A,B	20/28	A, B	24/25	B,C	27/30
22					A,B	22/30	B	30	B,C	40/42	C,D	45/55
33			A,B	22/35	B	34	B,C	42/48	C,D	52/59	C8,D	60/90
47	B	36	B	38	B,C	31/50	C,D	56/79	C,C8,D	60/60/65	C8,E	63/155
100	B,C	46/60	B,C	50/60	C,D	60/62	C8,D,E	91/100/160	C8,E	84/180	E,F	140/315
220	C,C8	74/105	C,C8,D	70/105/160	C8,D	105/160	E	155	E,F	190/270	F	220
330	C8,D,E	105/190/190	C8,E	125/195	E	195	E,F	250/340	F	300	G	490
470	C8,E	124/210	C8,E	120/210	E,F	230/380	F	300	G	460	H	550
1000	E,F	350/230	F	310	F,G	360/580	G,H	580/550	I	800	K	990
2200	G	650	G	680	I	900	I	900	K	1050		
3300	G/H	700/850	I	950	I	950	J, K	1200/1150				
4700	I	1000	I	1000	J, K	1275/1225						
6800	J, K	1350/1290	J, K	1350/1290								

Cap. \ WV	63		100		160		200		250		400		450	
uF	Size	RC	Size	RC	Size	RC	Size	RC	Size	RC	Size	RC	Size	RC
1	A	7												
2.2	A	12												
3.3	B, C	17/22							G	60			G	40
4.7	C	22	C,C8	21/28					G	65	E,G	28/45	G	45
10	C	32	C8	35			G	80	G	70	G	50	G,H	75/80
22	C8	58	E	100			H	110	G	105	I	85	I	85
33	E	140	F	150	G	95	H	120	I	180	K	100	K	100
47	E	170	F,G	150/250	I	240	I	220	I	220	L	130		
100	F	310	G	380	I	250	K	280	K	260				
220	G	470	I	450										
330	I	650	J, K	750/590										
470	I	700	L	980										

**Part Numbering System**

**EHV**    □ □ □    **M**    □ □    **R**    □  
 Series    Capacitance    Tolerance    Rated Voltage    Package    Case Size