HITANO ENTERPRISE CORP. ®

ELV SERIES

- SMD TYPE. Reflow Soldering is available.
- Life 2000 hours at 85℃
- Available For High Density Mounting

Characteristics

Voltage Range	4 to450 VDC											
Capacitance Range	0.1 to 6800uF											
Temperature Range	-40 to +85℃											
Capacitance Tolerance	+20% -20% (at 20℃, 120Hz)											
Leakage Current	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 or 4uA, 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											
Dissipation Factor (tanδ) Max (at 20℃, 120Hz)	Voltage (V)	4	6.3	10	16	25	35	50	63	100	160~250	400~450
	SIZE A~F	0.4	0.26	0.22	0.18	0.16	0.12	0.10	0.10	0.10	-	-
	SIZE G~L	-	0.38	0.34	0.30	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.											

Stability at Low Temperature (at 120Hz)	Voltage (V)		4	6.3	10	16	25	35	50	63	100	160~250	400~450
	Z -25℃ /Z +20℃	SIZE A~F	7	4	4	3	2	2	2	2	2	-	-
		SIZE G~L		5	5	4	2	2	2	2	2	3	6
	Z-40℃ /Z 20℃	SIZE A~F	15	8	5	4	3	3	3	3	3	-	-
		SIZE G~L		14	12	10	5	4	3	3	3	6	10

Load Life	After the rated voltage has been applied for 2000 hours at 85℃	Capacitance change	Within ±25% of initial value
		D.F. tanδ	200% or less of initial specified value
		Leakage current	Less than Initial specified value
Shelf Life	After storage for 1000 hours at 85℃, with no voltage applied and being stabilized at +20℃, Capacitor shall meet the limit specified in load life.		

Diagram of dimensions

SIZE	Dϕ	L	A	C	B	W	P±0.2
A	4	5.5	4.3	4.3	5.1	0.5~0.8	1.0
B	5	5.5	5.3	5.3	5.9	0.5~0.8	1.5
C	6.3	5.5	6.6	6.6	7.2	0.5~0.8	2.0
C8	6.3	7.7	6.6	6.6	7.2	0.5~0.8	2.0
D	8	6.5	8.4	8.4	9.0	0.5~0.8	2.2
E	8	10.5	8.4	8.4	9.0	0.7~1.1	3.1
F	10	10.5	10.4	10.4	11.0	0.7~1.3	4.7
G	12.5	13.5	13.0	13.0	13.7	1.1~1.4	4.7
H	12.5	16.0	13.0	13.0	13.7	1.1~1.4	4.6
I	16	16.5	17.0	17.0	18.0	1.1~1.4	6.0
J	16	21.5	17.0	17.0	18.0	1.1~1.4	6.0
K	18	16.5	19.0	19.0	20.0	1.1~1.4	6.4
L	18	21.5	19.0	19.0	20.0	1.1~1.4	6.4

Fig. 1

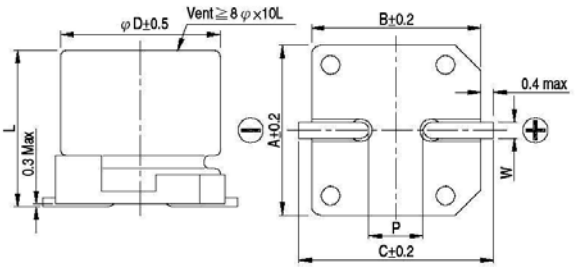
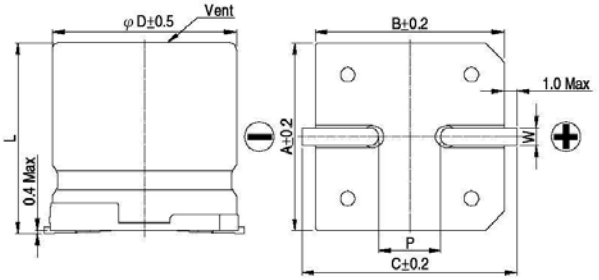


Fig. 2



Size A~F refer to Fig. 1

Size G~L refer to Fig. 2

Part Numbering System

ELV	□ □ □	□	□ □	**R**	□
Series	Capacitance	Tolerance	Rated Voltage	Package	Case Size

HITANO
ENTERPRISE CORP. ®

ELV SERIES

Case size & Maximum Ripple Current

mA rms 85℃ 120Hz

Cap. \ WV	4		6.3		10		16		25		35		50	
uF	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1													A	10
2.2													A	14
3.3													A	17
4.7													A	20
10							A	26	A	27	A, B	29/44	B, C	30/35
22			A	29	A	30	A, B	33/44	B, C	40/59	B, C	47/59	C, D	50/80
33	A	28	A	33	A	41	B	45	B, C	46/65	C	67	C8, D	75/155
47	A	33	A , B	33/46	B	52	B, C	55/60	C	60	C, D	65/115	C8, D	85/200
100	B	34	B, C	40/71	B, C	60/76	C	89	C8,D	109/160	C8, D	120/160	E, F	190/320
220	C	61	C, D	88/150	C8, D	130/190	C8, D	130/190	E	270	E, F	270/370	F	320
330	C8, D	135/145	C8, D	135/190	E	290	E	290	E,F	290/400	F	400	G	600
470	C8, D	200/220	E	290	E	290	E, F	290/400	F	400	G	750	H	740
1000	E	290	E, F	290/430	F	430	G	750	G	750	I	1100	J, K	1400/1350
2200			G	890	G	890	I	1100	I	1100	J, K	1500/1450		
3300			H	1000	I	1300	I	1300	J, K	1500/1450	L	1750		
4700			I	1400	I	1400	J, K	1650/1600	L	1750				
6800			J, K	1750/1700	J, K	1750/1700	L	2000						
10000			L	2000	L	2000								

Cap. \ WV	63		100		160		200		250		400		450	
uF	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7	B	25									G	120	G	120
10	C	40	E	90					G	150	G	120	H	130
22	E	139	E	90			G	240	G	150	I	140	I	140
33	E	139	F	120	G	240	H	310	H	240	I	140	K	180
47	F	200	F	120	H	370	I	340	I	340	K	280	L	250
68	F	226	G	380	I	500	I	340	J, K	450/440	L	350		
100	F	226	G	440	J, K	690/650	J, K	590/550	L	490				
220	G	500	I	600										
330	H	600	J, K	850/780										
470	I	850												