

LARGE CAN TYPE

LS Series

Snap-in Terminal Type, Miniature Sized



- Smaller case sized than LP series.
- Withstanding 2000 hours application of high ripple current at 85°C.

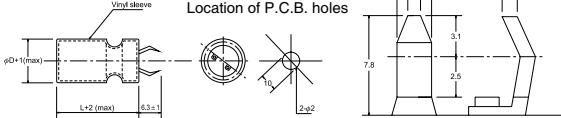


SPECIFICATION

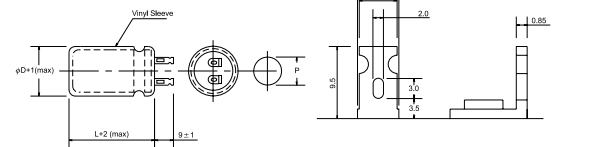
Item	Characteristic																
Operation Temperature Range	-40 ~ +85°C																
Rated Working Voltage	16 ~ 500VDC																
Capacitance Tolerance (120Hz 20°C)	±20%(M)																
Leakage Current (20°C)	I ≤ 0.02CV or 3 (mA) *Whichever is smaller after 5 minutes I : Leakage Current(μA) C : Rated Capacitance(μF) V : Working Voltage(V)																
Surge Voltage (20°C)	W.V.	16	25	35	50	63	80	100	160	180	200	250	350	400	450	500	
	S.V.	20	32	44	63	79	100	125	200	225	250	300	400	450	500	550	
Dissipation Factor (tan δ) (120Hz 20°C)	Rated Voltage (V)	16	25	35			50		63			80		100		≥160	
	Capacitance	—	—	≤22,000	≥33,000	≤6,800	≥10,000	≤6,800	≥10,000	≤2,200	≥3,300	≤3,300	≥4,700	—			
	tan δ	0.50	0.40	0.35	0.40	0.30	0.35	0.25	0.35	0.20	0.25	0.20	0.25	0.15			
Low Temperature Stability	Impedance ratio at 120Hz																
	Rated Voltage (V)	16~100					160~250					350~500					
	-25°C / +20°C	4					6					8					
	-40°C / +20°C	15					—					—					
Load Life	After 2000 hours application of W.V. and +85°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rate working voltage)																
	Capacitance Change	≤ ±15% of initial value															
	Dissipation Factor	≤ 175% of initial specified value															
	Leakage current	≤ initial specified value															
Shelf Life	At +85°C, no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (With voltage treatment)																

TERMINAL TYPE

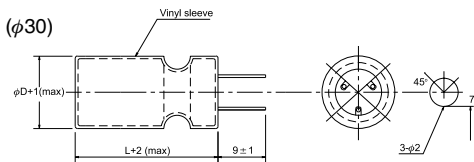
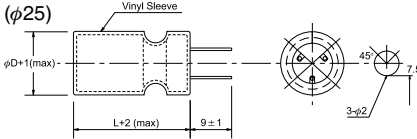
▲ P.C.B. TERMINAL (SNAP IN)
SYMBOL:W(φ22~35)



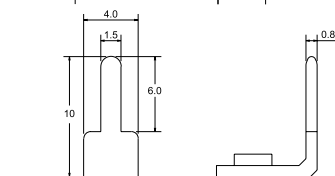
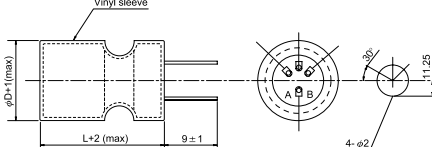
▲ LUG TERMINAL
SYMBOL:G(φ22~35)



▲ P.C.B. TERMINAL
SYMBOL:V(φ25~35)



(φ35)
A.B. blank terminals



RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	40	60	70	85
Multiplier	1.80	1.40	1.20	1.00

Frequency(Hz)	60	120	400	1k	10k
W.V.	Multiplier				
≤100V	0.80	1.00	1.10	1.20	1.20
≥160V	0.80	1.00	1.10	1.30	1.40

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : A(rms) 85°C 120Hz

μF	V(Code) Code φD	16 (1C)				25 (1E)				35 (1V)								
		22	25	30	35	22	25	30	35	22	25	30	35					
3300	332									25								
										2.04								
4700	472					25				30	25							
						2.25				2.41	2.30							
6800	682	25				30	25			35	30	25						
		2.40				2.69	2.56			2.82	2.70	2.66						
10000	103	30	25			35	30	25		45	35	30	25					
		2.81	2.67			3.09	2.97	2.92		3.34	3.06	3.04	3.28					
15000	153	40	30	25		45	35	30	25		50	35	30					
		3.43	3.11	3.07		3.70	3.39	3.37	3.63		4.06	3.67	3.98					
22000	223		45	30	25		45	35	30				45	40				
			4.25	3.78	4.09		4.48	4.25	4.61				4.94	5.41				
33000	333			45	35			50	40				L(mm)	50				
				5.48	5.67			6.05	6.33				R.C.	7.27				

μF	V(Code) Code φD	50 (1H)				63 (1J)				80 (1K)				100 (2A)								
		22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35					
1000	102													25				1.71	1.63			
														1.50								
1200	122																	35	30			
																		2.01	1.93			
1500	152					25				30	25							35	30	25		
						1.66				1.88	1.79							2.11	2.03	2.00		
1800	182																	45	35	30		
																		2.59	2.37	2.35		
2200	222	25				30	25			40	30	25						50	40	30	25	
		1.92				2.08	1.98			2.45	2.22	2.19						2.84	2.64	2.47	2.66	
3300	332	30	25			35	30	25		50	40	30	25						50	40	30	
		2.35	2.24			2.51	2.41	2.38		3.05	2.83	2.65	2.86					3.25	3.11	3.19		
4700	472	35	30	25		45	35	30	25		50	40	30							50	40	
		2.72	2.62	2.58		3.04	2.79	2.77	2.99		3.36	3.21	3.30							3.65	3.82	
6800	682	50	40	30	25		50	35	30				50	40								50
		3.45	3.20	3.00	3.23		3.53	3.19	3.46				3.80	3.98								4.48
10000	103		50	35	30			45	40													
			3.70	3.35	3.64			3.72	4.08													
15000	153			50	40				50													
				4.61	4.83				5.30													
18000	183				45																	
					5.55																	
22000	223				50																	L(mm)
					6.42																	R.C.

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
Max ripple current : A(rms) 85°C 120Hz

µF	V(Code) Code	φD	160 (2C)				180 (2M)				200 (2D)				250 (2E)			
			22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
220	221										25				25			
											1.25				1.31			
270	271										25				30	25		
											1.67				1.57	1.57		
330	331						25				30	25			35	30		
							1.31				1.66	1.66			1.85	1.87		
390	391		25				30	25			30	25			35	30	25	
			1.44				1.54	1.54			1.80	1.80			2.01	2.03	2.10	
470	471		30	25			30	25			35	30	25		40	35	25	25
			1.70	1.70			1.69	1.69			2.11	2.13	2.21		2.34	2.38	2.31	2.54
560	561		35	30			35	30	25		40	35	25		50	40	30	25
			1.99	2.23			1.97	1.99	2.06		2.44	2.48	2.41		2.82	2.74	2.71	2.78
680	681		40	30	25		40	35	25		45	35	30	25	45	35	30	
			2.32	2.21	2.29		2.30	2.34	2.27		2.83	2.73	2.85	2.92	3.19	3.18	3.28	
820	821		45	35	30		45	40	30	25	40	30	25		50	40	30	
			2.68	2.58	2.70		2.67	2.72	2.68	2.75	3.17	3.13	3.21		3.67	3.69	3.60	
1000	102		50	40	30	25	45	35	25		50	35	30				45	35
			3.11	3.02	2.98	3.05	3.16	3.15	3.04		3.87	3.68	3.80				4.28	4.22
1200	122		45	35	30		50	40	30			40	35				50	40
			3.49	3.48	3.59		3.63	3.65	3.56			4.26	4.42				4.91	4.88
1500	152		40	35			45	35					40					50
			4.11	4.26			4.15	4.09					5.02					5.74
1800	182		45	35					40				50					L(mm)
			4.73	4.67					4.73				6.04					R.C.

µF	V(Code) Code	φD	350 (2V)				400 (2G)				450 (2W)				500 (2H)			
			22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
82	820						25				30	25			35	30	25	
							0.76				0.83	0.83			0.73	0.74	0.76	
100	101		25				30	25			35	30	25		40	30	25	
			0.73				0.91	0.91			0.97	0.98	1.02		0.85	0.81	0.84	
120	121		30	25			30	25			40	30	25		45	35	30	
			0.86	0.86			1.00	1.00			1.13	1.08	1.12		0.99	0.95	0.99	
150	151		30	25			35	30	25		45	35	30		50	40	35	30
			0.96	0.96			1.19	1.20	1.25		1.33	1.28	1.34		1.15	1.12	1.18	1.22
180	181		35	30	25		40	35	25		50	40	30	25	45	40	30	
			1.13	1.14	1.18		1.38	1.40	1.37		1.53	1.49	1.47	1.50	1.30	1.37	1.33	
220	221		40	35	25		50	40	30	25	45	35	30		50	45	35	
			1.32	1.34	1.30		1.69	1.64	1.62	1.66	1.73	1.72	1.78		1.50	1.59	1.57	
270	271		50	40	30	25	45	35	30			40	35				50	45
			1.61	1.57	1.55	1.59	1.92	1.91	1.97			2.02	2.10				1.84	1.92
330	331		45	35	30		50	40	30			45	35					45
			1.82	1.82	1.88		2.22	2.23	2.18			2.35	2.32					2.13
390	391		50	40	30			45	35				40					50
			2.08	2.10	2.04			2.55	2.52				2.66					2.42
470	471		40	35					40				45					
					2.30	2.38			2.92				3.07					
560	561		50	40					45									
					2.76	2.75			3.34									
680	681		45						50									L(mm)
					3.18				3.85									R.C.