

# 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.

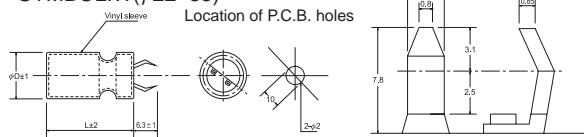


### SPECIFICATION

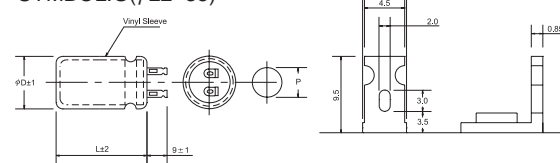
Item	Characteristic																								
Operation Temperature Range	-40 ~ +85°C																								
Rated Working Voltage	16 ~ 500VDC																								
Capacitance Tolerance (120Hz 20°C)	±20%(M)																								
Leakage Current (20°C)	$I \leq 0.02CV$ or 3 (mA) *Whichever is smaller after 5 minutes I : Leakage Current ( $\mu A$ ) C : Rated Capacitance ( $\mu F$ ) V : Working Voltage (V)																								
Surge Voltage (20°C)	W.V.	16	25	35	50	63	80	100	160	180	200	250	350	350	400	450	500								
	S.V.	20	32	44	63	79	100	125	200	225	250	300	400	400	450	500	550								
Dissipation Factor (tan $\delta$ ) (120Hz 20°C)	Rated Voltage (V)	16			25			35			50			63			80			100			≥160		
	Capacitance	≤47,000	≥56,000	≤33,000	≥47,000	≤22,000	≥33,000	≤6,800	≥10,000	≤6,800	≥10,000	≤2,200	≥3,300	≤3,300	≥4,700	—									
	tan $\delta$	0.50	0.60	0.40	0.50	0.35	0.40	0.30	0.35	0.25	0.35	0.20	0.25	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. at +85°C the capacitor shall meet the following limits.																								
	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 ( $\phi 22 \sim 35$ )

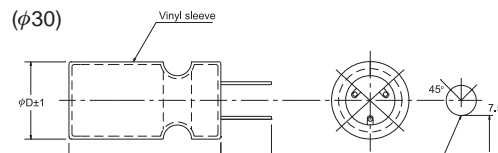
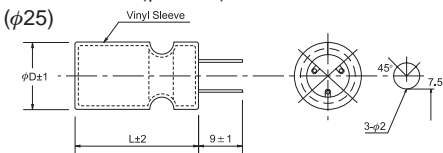


#### ▲ LUG TERMINAL SYMBOL: G ( $\phi 22 \sim 35$ )

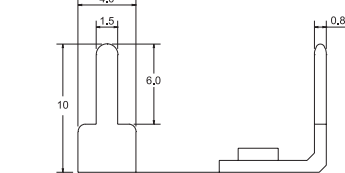
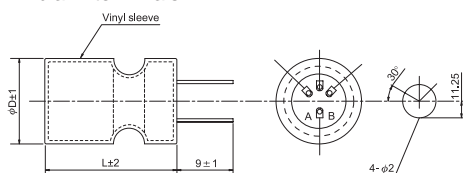


$\phi D$	22	25	30	35
P	8	10	10	14

#### ▲ P.C.B. TERMINAL SYMBOL: V ( $\phi 25 \sim 35$ )



#### ( $\phi 35$ ) 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

※ For  $\phi 45$  dimension, refer to page 14.





● CASE SIZE & MAX RIPPLE CURRENT

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

μF	V(Code) Code	φD	350 (2V)					400 (2G)					450 (2W)					500 (2H)									
			22	25	30	35	45	22	25	30	35	45	22	25	30	35	45	22	25	30	35	45					
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										50						
						3.18					3.85										3.70						
820	821											50										55					
												4.06										4.22					
1000	102						50					55															
							4.14					4.66															
1500	152						60																				L(mm)
							4.43																				R.C.