

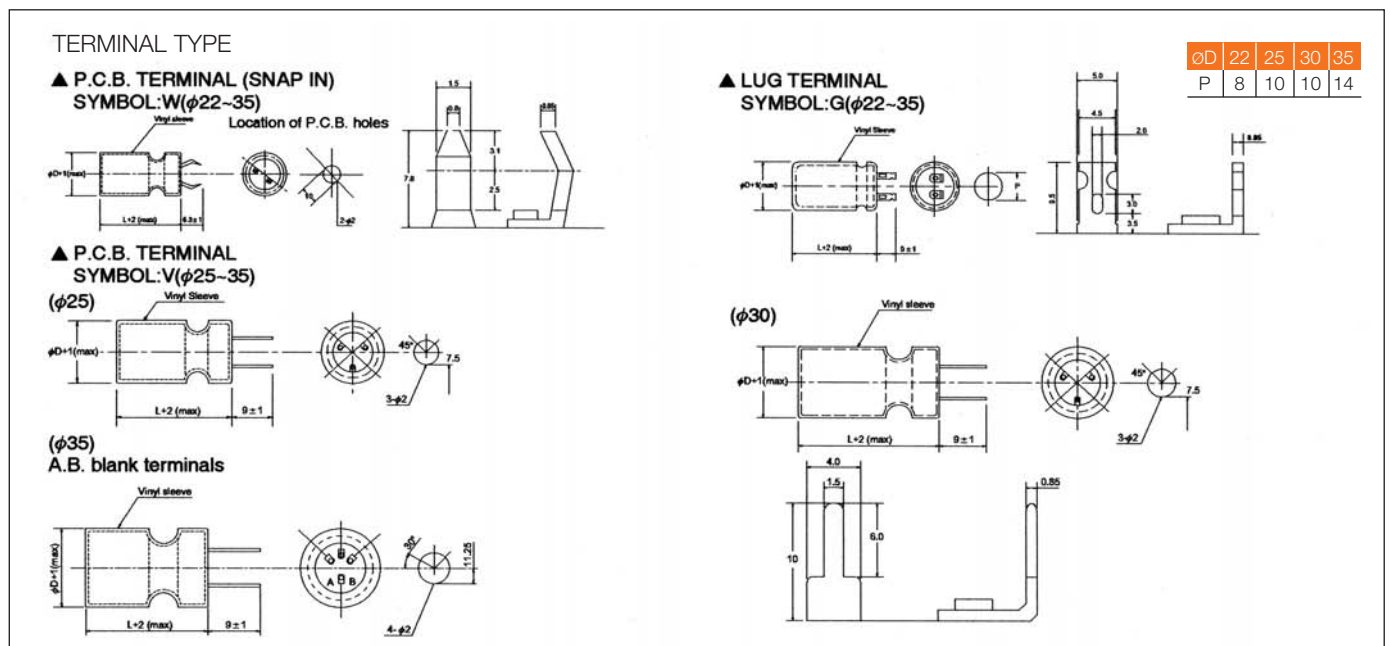
**LP SERIES
Snap-in Terminal Type
Standard**



- Three kinds of terminal are available for your use.
- Withstanding 2,000 hours application of high ripple current at 85 °C.

SPECIFICATION

Item	Characteristic														
Operation Temperature Range	-40 ~ +85 °C							-25 ~ +85 °C							
Rated Working Voltage	10 ~ 100 VDC							160 ~ 450 VDC							
Capacitance Tolerance (120 Hz 20 °C)	±20%(M)														
Leakage Current (20 °C)	$I \leq 0.03CV$ 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.	10	16	25	35	50	63	100	160	200	250	350	400	450	
	S.V.	13	20	32	44	63	79	125	200	250	300	400	450	500	
Dissipation Factor (tan δ) (120 Hz 20 °C)	Rated Voltage (V)			10	16	25	35	50	63	100	160~250	350~450			
	tan δ	$CV \leq 100,000$			0.50	0.40	0.35	0.25	0.25	0.25	0.20	0.20	0.25		
		$CV > 100,000$			0.60	0.50	0.45	0.35	0.30	0.30	0.25	0.20	0.25		
Low Temperature Stability	Impedance ratio at 120 Hz														
	Rated Voltage (V)			10~100				160~250				350~450			
	-25 °C / +20 °C			4				6				8			
	-40 °C / +20 °C			15				—				—			
Load Life	After 2,000 hours application of W.V. at +85 °C, the capacitor shall meet the following limits.														
	Capacitance Change			≤ ±20% of initial value											
	Dissipation Factor			≤ 150% of initial specified value											
	Leakage Current			≤ initial specified value											
Shelf Life	At +85 °C no voltage application after 1,000 hours, the capacitor shall meet the limits for load life characteristics (with voltage treatment)														



RIPPLE CURRENT COEFFICIENTS

Temperature (°C)	Multiplier
45	1.55
60	1.30
70	1.20
85	1.00

Frequency (Hz)	60	120	1k	10k	100k
W.V.	Multiplier				
10~35V	0.90	1.00	1.05	1.10	1.10
50~100V	0.90	1.00	1.15	1.20	1.20
160~250V	0.80	1.00	1.35	1.45	1.50
350~450V	0.90	1.00	1.30	1.40	1.45

Case Size & Max Ripple Current

Case size: DxL mm - Max ripple current: A(rms) 85 °C 120 Hz

		V (Code)							
		10 (1A)		16 (1C)		25 (1E)		35 (1V)	
µF	Code	Item							
		DxL	R.C.	DxL	R.C.	DxL	R.C.	DxL	R.C.
3.300	332					22x25	2.03	22x25	2.04
						25x25	2.09	25x25	2.10
4.700	472			22x25	1.81	22x30	2.43	22x30	2.41
				25x25	2.21	25x25	2.31	30x25	2.44
6.800	682			22x25	2.40	22x35	2.87	22x40	2.98
				25x25	2.47	30x25	2.72	30x30	2.86
8.200	822	22x25	2.39	22x30	2.70	22x40	3.16	22x45	3.25
		25x25	2.46	30x25	2.73	30x30	3.03	35x30	3.42
10.000	103	22x30	2.69	22x35	3.00	22x45	3.45	25x45	3.41
		25x25	2.57	30x25	2.84	30x30	3.14	35x30	3.51
12.000	123	22x30	2.81	22x40	3.30	22x50	3.74	25x50	3.68
		30x25	2.84	30x30	3.16	35x30	3.75	35x35	3.84
15.000	153	22x35	3.14	22x45	3.62	25x45	3.78	30x45	4.08
		30x25	2.97	35x25	3.55	35x30	3.89	35x40	4.47
22.000	223	22x45	3.79	25x45	4.25	30x50	4.94	35x45	5.68
		30x30	3.45	35x30	4.37	35x40	5.17		
33.000	333	25x45	4.99	30x45	5.48	30x50	6.95	35x70	8.42
		35x30	4.89	35x40	6.01				
47.000	473	30x45	5.97	35x45	7.53	35x60	8.97		
		35x40	6.54						
68.000	683	35x50	8.64	35x60	10.24				

		V (Code)					
		50 (1H)		63 (1J)		100 (2A)	
µF	Code	Item					
		DxL	R.C.	DxL	R.C.	DxL	R.C.
820	821					22x30	1.55
						25x25	1.54
1.000	102			22x25	1.42	22x30	1.71
				25x25	1.46	30x25	2.20
1.500	152			22x25	1.74	22x40	2.38
				30x25	1.81	35x30	2.54
2.200	222	22x25	1.92	22x30	2.08	25x45	2.77
		25x25	1.98	30x25	2.10	35x30	2.85
3.300	332	22x35	2.51	22x45	2.81	30x45	3.27
		30x25	2.38	35x25	2.76	35x35	3.39
4.700	472	22x40	2.89	25x45	3.11	35x45	4.01
		35x25	2.99	35x30	3.20		
6.800	682	25x45	3.37	30x45	3.54	35x60	4.85
		35x30	3.46	35x35	3.68		
8.200	822	25x50	3.62	30x50	3.81	35x70	5.30
		35x35	3.79	35x40	3.99		
10.000	103	30x45	3.72	35x50	4.48	35x70	5.49
		35x35	3.86				
12.000	123	35x45	4.53	35x60	5.13		
15.000	153	35x50	5.30				

Case Size & Max Ripple Current

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

		V (Code)					
		160 (2C)		200 (2D)		250 (2E)	
		Item					
µF	Code	DxL	R.C.	DxL	R.C.	DxL	R.C.
220	221			22x25	0.97	22x30	1.14
				25x25	1.00	25x25	1.09
330	331	22x25	1.11	22x30	1.29	22x40	1.58
		25x25	1.14	25x25	1.23	30x25	1.42
470	471	22x35	1.53	22x40	1.74	22x50	2.09
		30x25	1.45	30x25	1.55	30x35	1.93
560	561	22x35	1.67	22x45	2.00	25x45	2.29
		30x25	1.58	30x30	1.82	35x30	2.22
680	681	22x40	1.95	25x40	2.14	30x40	2.46
		30x30	1.87	30x35	2.14	35x35	2.68
820	821	22x50	2.36	25x50	2.59	30x45	2.83
		30x30	2.05	35x30	2.55	35x40	3.11
1.000	102	25x45	2.55	30x45	2.87	35x45	3.60
		35x30	2.62	35x35	2.99		
1.500	152	30x45	3.28	35x50	4.24		

		V (Code)					
		350 (2V)		400 (2G)		450 (2W)	
		Item					
µF	Code	DxL	R.C.	DxL	R.C.	DxL	R.C.
47	470			22x25	0.43	22x25	0.36
				25x25	0.45	25x25	0.37
100	101	22x30	0.66	22x30	0.68	22x35	0.61
		25x25	0.63	25x25	0.65	25x30	0.59
150	151	22x35	0.86	22x40	0.95	22x50	0.88
		30x25	0.82	30x25	0.85	30x30	0.76
220	221	22x45	1.17	22x50	1.27	25x50	1.08
		30x30	1.06	25x40	1.17	35x35	1.13
330	331	25x50	1.53	30x45	1.59	35x45	1.53
		35x35	1.60	35x35	1.65		
470	471	30x50	1.92	35x45	2.19		
		35x40	2.01				
560	561	35x45	2.31				