

# LARGE CAN TYPE

# HP

Series

Snap-in Terminal, Wide Temperature Range



- Three kinds of terminal are available for your use.
- High temperature 105°C, high ripple current and high reliability.

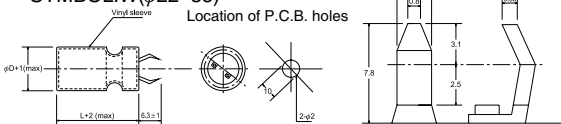


## SPECIFICATION

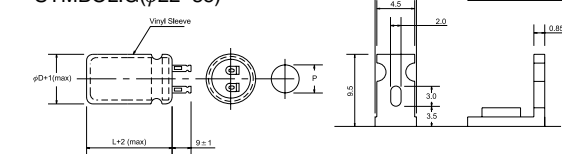
Item	Characteristic												
Operation Temperature Range	-40 ~ +105°C						-25 ~ +105°C						
Rated Working Voltage	16 ~ 100VDC						160 ~ 400VDC						
Capacitance Tolerance (120Hz 20°C)	±20%(M)												
Leakage Current (20°C)	$I \leq 0.02CV$ or $3 \text{ (mA)}$ *Whichever is smaller after 5 minutes I : Leakage Current(μA) C : Rated Capacitance(μF) V : Working Voltage(V)												
Surge Voltage (20°C)	W.V.	16	25	35	50	63	100	160	200	250	350	400	
	S.V.	20	32	44	63	79	125	200	250	300	400	450	
Dissipation Factor (tan δ) (120Hz 20°C)	W.V.	16	25	35	50	63	100	160	200	250	350	400	
	tan δ	0.45	0.35	0.30	0.25	0.25	0.20	0.15	0.15	0.15	0.20	0.20	
Low Temperature Stability	Impedance ratio at 120Hz												
	Rated Voltage (V)	16	25	35	50	63~100	160~250	350~400					
	-25°C / +20°C	6	6	6	4	3	4	6					
	-40°C / +20°C	15	15	10	8	6	—	—					
Load Life	After 2000 hours application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage ≤ rate working voltage)												
	Capacitance Change	≤ ±20% of initial value											
	Dissipation Factor	≤ 200% of initial specified value											
	Leakage current	≤ initial specified value											
Shelf Life	At +105°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)

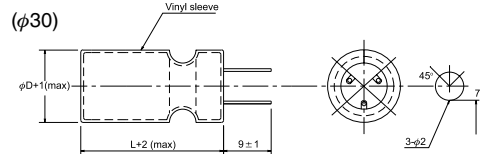
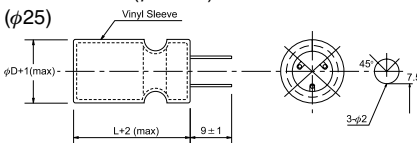


▲ LUG TERMINAL  
SYMBOL:G(φ22~35)

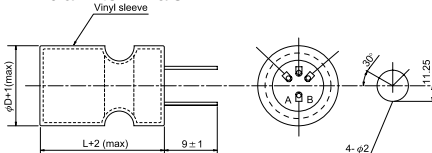


φD	22	25	30	35
P	8	10	10	14

▲ P.C.B. TERMINAL  
SYMBOL:V(φ25~35)



A.B. blank terminals



## RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	45	60	85	105
Multiplier	2.55	2.25	1.65	1.00

Frequency(Hz)	60	120	300	1k	10k	100k
W.V.	Multiplier					
16~50V	0.90	1.00	1.03	1.05	1.10	1.10
63~100V	0.85	1.00	1.07	1.13	1.19	1.20
160~400V	0.80	1.00	1.15	1.25	1.35	1.40



● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)  
 E.S.R. : Ω 20°C 120Hz  
 Max ripple current : A(rms) 105°C 120Hz

μF	V(Code)		16 (1C)			25 (1E)			35 (1V)		
	Code	Item	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.
1000	102								22x25	0.497	0.86
1500	152								22x25	0.332	1.01
2200	222					22x25	0.264	1.17	22x35	0.226	1.34
3300	332		22x25	0.226	1.23	22x35	0.176	1.54	22x45	0.151	1.70
4700	472		22x30	0.159	1.47	22x40	0.123	1.79	25x45	0.106	1.88
6800	682		22x40	0.110	1.84	25x45	0.085	2.11	25x50	0.073	2.14
8200	822		22x45	0.091	2.02	25x45	0.071	2.18			
10000	103		25x45	0.075	2.14	25x50	0.058	2.35			
12000	123		25x50	0.062	2.32						
15000	153		25x50	0.050	2.40						

μF	V(Code)		50 (1H)			63 (1J)		
	Code	Item	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.
470	471							
560	561							
680	681					22x25	0.610	0.75
820	821					22x25	0.505	0.82
1000	102		22x25	0.414	0.91	22x30	0.414	0.98
1500	152		22x30	0.276	1.14	22x35	0.276	1.22
2200	222		22x40	0.188	1.49	25x40	0.188	1.52
3300	332		25x45	0.126	1.81	25x50	0.126	1.89
4700	472		25x50	0.088	2.04			

μF	V(Code)		100 (2A)			160 (2C)			200 (2D)		
	Code	Item	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.
150	151								22x30	1.658	0.60
220	221					22x30	1.130	0.66	22x35	1.130	0.78
330	331					22x35	0.754	0.87	22x40	0.754	1.01
470	471		22x30	0.705	0.76	22x40	0.529	1.10	25x40	0.529	1.23
560	561		22x35	0.592	0.89	22x45	0.444	1.26	25x45	0.444	1.41
680	681		22x40	0.488	1.04	25x40	0.366	1.35	30x40	0.366	1.56
820	821		22x45	0.404	1.20	25x50	0.303	1.64	30x45	0.303	1.80
1000	102		25x45	0.332	1.35	30x45	0.249	1.82	30x50	0.249	2.08
1500	152		25x50	0.221	1.63						
2200	222		30x40	0.151	1.78						

μF	V(Code)		250 (2E)			350 (2V)			400 (2G)		
	Code	Item	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.	DxL	E.S.R.	R.C.
47	470								22x25	7.055	0.30
100	101		22x25	2.487	0.51	22x35	3.316	0.48	22x40	3.316	0.53
150	151		22x35	1.658	0.72	22x45	2.210	0.65	22x50	2.210	0.72
220	221		22x45	1.130	0.97	25x40	1.507	0.77	25x50	1.507	0.89
330	331		25x45	0.754	1.21	30x45	1.005	1.09	30x50	1.005	1.14
470	471		25x50	0.529	1.52						
560	561		30x45	0.444	1.66						
680	681		30x50	0.366	1.92						



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