

HPB series

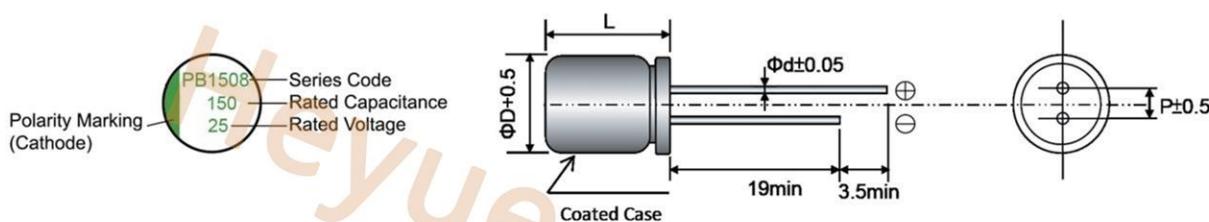
- Low ESR.
- High Voltage, Long Life.
- 125°C, 2,000~4,000hrs.
- RoHS compliant
- For automotive moudles and other high temperature applications

SPECIFICATIONS

Items	Conditions	Characteristics
Category Temperature Range	—	-55 to +125°C
Rated Voltage Range	—	16 ~ 50V
Capacitance Tolerance	at 20°C,120Hz	±20%(M)
Surge Voltage	at 15 ~ 35°C	Rated voltage ×1.25V
Leakage Current	at 20°C after 2 minutes	I ≤ 0.01CV or 3(μA) Whichever is greater measured,after 2 minutes application of rated working voltage at +20°C. Please see the attached characteristics list
Dissipation Factor (tan δ)	at 20°C,120Hz	Please see the attached characteristics list
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 to 4,000 hours at 125°C. Φ6.3=2,000hrs,D≥Φ8=4,000hrs.	Appearance NO significant damage. Capacitance change ≤ ±30% of the initial value. DF (tan δ) ≤ 200% of the initial specified value. ESR ≤ 200% of the initial specified value. Leakage current ≤ The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to store at 60°C, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance NO significant damage. Capacitance change ≤ ±30% of the initial value. DF (tan δ) ≤ 200% of the initial specified value. ESR ≤ 200% of the initial specified value. Leakage current ≤ The initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 15~35°C for 30 seconds through a protective resistor (R = 1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance NO significant damage. Capacitance change ≤ ±30% of the initial value. DF (tan δ) ≤ 200% of the initial specified value. ESR ≤ 200% of the initial specified value. Leakage current ≤ The initial specified value.

※ Note : If any doubt arises, measure the leakage current after following voltage treatment.

Voltage treatment : DC rated voltage are applied to the capacitors for 120 minutes at 125°C.



Size Code	6.3x7.2	8x9.5	10x9.5	10x11.5
Φ D	6.3	8.0	10.0	10.0
L	L+1.5max	L+1.5max	L+1.5max	L+1.5max
Φ d	0.5	0.6	0.6	0.6
P	2.5	3.5	5.0	5.0

注：以上所提供的设计及特性参数仅供参考，任何修改不作预先通知，如有使用上任何疑问，请在采购前与我们联系，以便提供技术上的协助。

HPB SERIES STANRD CHARACTERISITICS LIST

Rated voltage (S.V.)	Cap (μF)	Size Code DxL	Leakage current (μA) max.	ESR (mΩ) max. 100k to 300kHz / 20°C	Rated Ripple Current (mA rms) 100kHz / 125°C	D.F. (tanδ) max. 120Hz / 20°C
16 (20)	120	6.3x7.2	19	40	1,100	0.16
	270	8x9.5	43	26	1,500	0.16
	470	10x9.5	75	21	2,000	0.16
	560	10x11.5	90	15	2,300	0.16
25 (32)	68	6.3x7.2	17	45	1,000	0.16
	150	8x9.5	38	27	1,300	0.16
	270	10x9.5	68	22	1,500	0.16
	330	10x11.5	83	16	1,700	0.16
35 (44)	47	6.3x7.2	16	60	900	0.16
	100	8x9.5	35	30	1,200	0.16
	150	10x9.5	53	23	1,400	0.16
	220	10x11.5	77	17	1,600	0.16
40 (50)	27	6.3x7.2	11	70	900	0.16
	56	8x9.5	22	32	1,200	0.16
	100	10x9.5	40	24	1,400	0.16
	120	10x11.5	48	18	1,600	0.16
50 (63)	15	6.3x7.2	8	80	800	0.16
	33	8x9.5	17	35	1,100	0.16
	56	10x9.5	28	25	1,300	0.16
	82	10x11.5	41	19	1,500	0.16

Frequency Coefficient of Permissible Ripple Current

Capacitance (μF)	Frequency (Hz)	100 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
4.7 < C ≤ 33	0.05	0.32	0.67	1.00	
33 < C	0.10	0.35	0.70	1.00	

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