

LHX Series

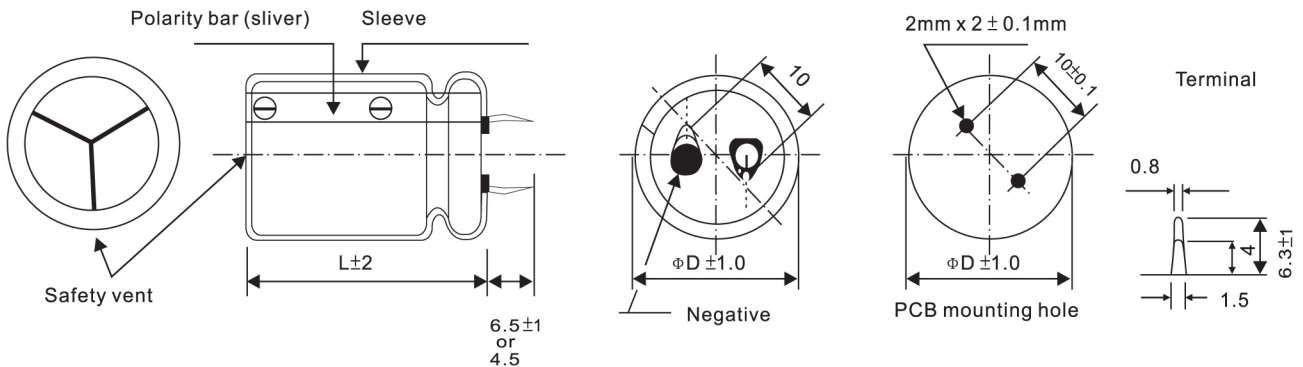
- Standard series General purples
- Endurance: 105°C 1000 hours (紋波疊加)



• SPECIFICATIONS

Items	Characteristics	
Category	- 40 to +105°C	- 25 to +105°C
Temperature Range		
Rated Voltage Range	10 to 100 Vdc	160 to 450 Vdc
Capacitance Tolerance	± 20% (M) (at 20°C , 120Hz)	
Leakage Current	I=0.02CV, (3mA max) whichever is greater. (at 20°C, after 2 minutes) Where, I :Max. Leakage current (µA). C : Nominal capacitance (µF) .V :Rated voltage(V)	
Dissipation Factor (tan δ)	Rated voltage (Vdc)	10v 16v 25v 35v 50v 63v 80v 100v 160v 200v 250v 400v 450v
	tan δ (Max.)	0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.15 0.15 0.15 0.15
	(at 20°C , 120Hz)	
Low Temperature Characteristics	Impedance ration max at 120Hz	
	Working voltage	10 16 25 35 50 63 80 100 160 200 250 350 400~450
	Z-25°C/ Z+20°C	5 5 4 4 4 4 4 4 4 4 4 8 8
	Z-40°C/ Z+20°C	15 15 10 8 6 5 4 4 8 10
Load. Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the voltage is applied for 1000 hours at 105°C	
	Capacitance change	≤ ±20% of the initial value
	DF (tan δ)	≤ 200 % of the initial specified value
	Leakage current	≤ The initial specified value
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing for 500 hours at 105°C without voltage applied.	
	Capacitance change	≤ ±20% of the initial value
	DF (tan δ)	≤ 200 % of the initial specified value
	Leakage current	≤ The initial specified value

• Diagram: (Unit: mm)



Chip Type SMD
Miniature Type
General Purpose
High Frequency Low Impedance
High Voltage High Reliability
Non-polar Type
Large Size Snap-in
Large Size Screw
X Metallized Polypropylene Film Capacitors

• STANDARD RATING

CAP(μF)	Vdc		10v						16v							
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ				
6800																
8200									22*25	2.56						
10000									22*30	2.81						
12000	22*25	2.41							22*30	3.31	25*25	2.96				
15000	22*30	2.88	25*25	2.88					22*35	3.69	25*30	3.64	30*25	3.73		
18000	22*35	3.22	25*30	3.08					22*40	3.98	25*35	3.98	30*30	3.88		
22000	22*40	3.79	25*30	3.66	30*25	3.53			22*50	4.52	25*40	4.44	30*30	4.38		
27000	22*45	4.04	25*35	4.04	30*30	3.99					25*45	4.98	30*35	4.82	35*30	4.82
33000	22*50	4.58	25*40	4.56	30*30	4.58					25*50	5.49	30*40	5.38	35*35	5.33
39000			25*45	5.29	30*35	5.21	35*30	5.05					30*45	6.11	35*35	6.01
47000			25*50	5.78	30*40	5.78	35*35	5.55					30*50	6.80	35*40	6.80
56000					30*45	6.59	35*35	6.40							35*45	7.62
68000					30*50	7.50	35*40	7.48								
82000							35*50	8.50								

CAP(μF)	Vdc		25v						35v							
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ				
2700																
3300																
3900									22*25	2.22						
4700									22*30	2.46	25*25	2.43				
5600	22*25	2.31							22*35	2.79	25*30	2.75				
6800	22*30	2.56							22*40	2.89	25*30	2.89	30*25	3.09		
8200	22*35	2.81	25*25	2.78					22*45	3.47	25*35	3.33	30*30	3.29		
10000	22*35	3.18	25*30	3.16					22*50	3.59	25*40	3.59	30*30	3.61		
12000	22*40	3.53	25*35	3.48	30*25	3.53					25*45	4.01	30*35	4.01	35*30	4.02
15000	22*50	4.08	25*40	4.00	30*30	4.00							30*40	4.80	35*35	4.80
18000			25*45	4.68	30*35	4.66	35*30	4.68					30*45	5.18	35*40	5.71
22000					30*40	5.19	35*35	5.20							35*45	6.38
27000					30*45	6.02	35*40	6.02							35*50	6.90

CAP(μF)	Vdc		50v						63v							
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ				
1500																
1800									22*25	1.90						
2200	22*25	1.93							22*30	2.35	25*25	2.30				
2700	22*30	2.21							22*35	2.50	25*30	2.49				
3300	22*30	2.41	25*25	2.38					22*40	2.69	25*30	2.69	30*25	2.78		
3900	22*35	2.72	25*30	2.68					22*45	3.10	25*40	3.25	30*30	3.09		
4700	22*40	3.01	25*30	3.03	30*25	3.01			22*50	3.49	25*40	3.37	30*30	3.37		
5600	22*45	3.43	25*35	3.37	30*30	3.43					25*45	3.80	30*35	3.81	35*30	3.75
6800	22*50	3.94	25*40	3.87	30*35	3.87					25*50	4.41	30*40	4.41	35*35	4.33
8200			25*45	4.37	30*35	4.41	35*30	4.41					30*45	4.90	35*35	4.80
10000					30*40	5.02	35*35	4.92					30*50	5.49	35*40	5.47
12000					30*50	5.60	35*40	5.60							35*50	6.30
15000							35*45	6.44								

Max ripple current (Arms/120Hz 105°C)

◆ LARGE ALUMINUM ELECTROLYTIC CAPACITORS LHX Snap-in 105°C

CAP(μF)	Vdc		80v				100v								
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ							
680															
820						22*25	1.86								
1000						22*30	2.02								
1200	22*25	1.77				22*30	2.12	25*25	2.10						
1500	22*30	2.01				22*35	2.45	25*30	2.43						
1800	22*35	2.25	25*25	2.26		22*40	2.77	25*35	2.77	30*25	2.65				
2200	22*40	2.53	25*30	2.53	30*25	2.50		22*50	3.12	25*40	3.20	30*30	3.10		
2700	22*45	2.93	25*35	2.93	30*30	2.91				25*45	3.61	30*35	3.60	35*30	3.71
3300	22*50	3.25	25*40	3.25	30*30	3.23				25*50	4.06	30*40	4.05	35*35	4.07
3900			25*45	3.62	30*35	3.62						30*45	4.60	35*35	4.50
4700			25*50	4.28	30*40	4.15	35*30	4.10				30*50	5.13	35*40	5.12
5600					30*45	4.55	35*35	4.51						35*55	5.17
6800					30*50	5.18	35*40	5.14						35*55	6.01
8200							35*45	5.83							

CAP(μF)	Vdc		160v				200v							
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ						
180						22*25	0.98							
220						22*30	1.36							
270						22*30	1.50							
330						22*35	1.89	25*30	1.89					
390	22*25	1.55				22*35	1.92	25*30	1.92					
470	22*30	1.77	25*25	1.77		22*40	2.23	25*35	2.23	30*25	2.23			
560	22*35	2.05	25*30	2.05		22*45	2.57	25*40	2.57	30*30	2.57			
680	22*40	2.24	25*30	2.22	30*25	2.22	22*45	2.36	25*40	2.36	30*30	2.36		
820	22*45	2.55	25*35	2.52	30*30	2.51	22*50	2.68	25*40	2.66	30*35	2.62		
1000	22*50	2.88	25*40	2.86	30*30	2.82	22*50	3.10	25*45	3.12	30*35	3.00		
1200			25*45	3.27	30*35	3.25	35*30	3.24		25*45	3.25	30*45	3.44	
1500					30*40	3.77	35*35	3.75		25*50	3.65	30*50	3.93	
1800					30*45	4.10	35*35	4.08					35*45	4.37
2200							35*45	4.72					35*50	5.00

CAP(μF)	Vdc		250v				350v						
	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ					
120						22*25	0.99						
150						22*30	1.44	25*25	1.16				
180						22*35	1.28	25*30	1.30				
220	22*25	1.18				22*40	1.40	25*35	1.46				
270	22*30	1.43				22*45	1.62	25*35	1.65	30*30	1.71		
330	22*40	1.58	25*25	1.53		22*50	1.78	25*40	1.88	30*35	1.93		
390	22*40	1.79	25*30	1.79				25*45	2.04	30*35	2.12	35*30	2.19
470	22*45	2.05	25*35	2.05	30*25	1.94				30*40	2.41	35*35	2.43
560	22*45	2.36	25*35	2.24	30*30	2.24				30*45	2.60	35*35	2.62
680			25*40	2.54	30*35	2.58						35*40	3.00
820			25*50	2.87	30*35	2.84	35*30	2.82				35*50	3.30

Max ripple current (Arms/120Hz 105°C)

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 Miniature Type
 General Purpose
 High Frequency Low Impedance
 High Voltage High Reliability
 Non-polar Type
 Large Size Snap-in
 Large Size Screw
 X Metallized Polypropylene Film Capacitors

◆ LARGE ALUMINUM ELECTROLYTIC CAPACITORS LHX Snap-in 105°C

Vdc CAP(μF)	400v								450v							
	22 φ		25 φ		30 φ		35 φ		22 φ		25 φ		30 φ		35 φ	
47	22*25	0.42							22*25	0.36						
56	22*25	0.47							22*25	0.47						
68	22*25	0.51							22*25	0.68						
82	22*25	0.80							22*30	0.82						
100	22*30	0.94	25*25	0.94					22*35	0.90	25*25	0.92				
120	22*30	1.04	25*25	1.08					22*35	1.02	25*30	1.04	30*25	1.07		
150	22*35	1.18	25*30	1.21					22*40	1.12	25*35	1.19	30*30	1.23		
180	22*40	1.34	25*35	1.37	30*25	1.45			22*50	1.26	25*40	1.33	30*30	1.38		
220	22*50	1.50	25*35	1.56	30*30	1.58					25*45	1.51	30*35	1.56	35*30	1.58
270			25*40	1.70	30*35	1.73					25*50	1.65	30*40	1.80	35*35	1.81
330			25*50	1.90	30*40	1.95	35*30	1.95					30*45	2.02	35*35	2.05
390					30*45	2.15	35*35	2.17					30*50	2.24	35*40	2.27
470					30*50	2.26	35*40	2.42							35*45	2.55
560							35*45	2.71								
680							35*50	2.95								

Max ripple current:Arms/120Hz 105°C Size: D φ x L (mm)

● Ripple CurRent / Frequency Multiplier

Vdc \ Freq	60	120	1k	10k up
10~100v	0.9	1.00	1.15	1.25
160~250v	0.8	1.00	1.15	1.45
350v up	0.8	1.00	1.15	1.47

● Temperature coefficient

Temperature(°C)	~55	60	70	85	105
Factor	2.23	2.27	2.0	1.75	1.00