

LG High temperature for general purpose Series

- Endurance : 105°C 2000 hours
- Ideally suitable for using in Switching Power Supplies and other industrial /commercial applications
- For detail specifications , please refer to Engineering Bulletin No. 2062

LG
↑ High temperature
LH P77



Specifications

Item	Characteristics									
Category Temperature Range	-40 ~ +105°C	-25 ~ +105°C								
Rated Voltage Range	6.3 ~ 100V	160 ~ 450V								
Capacitance Range	560 ~ 82000 μF	47 ~ 2200 μF								
Capacitance Tolerance	± 20 % at 120Hz , 25°C									
Leakage Current (MAX)	I=0.02CV,L=20m/m,I=0.03CV or 3mA , whichever is smaller.(At 25°C, After 5 minutes) Where, I :Leakage Current (μA) ; C:Nominal Capacitance(μF) ; V:Rated Voltage(v)									
Dissipation Factor (MAX)	Note:*(15%)For Case Size D=35m/m or L=20m/m(At 120Hz,25°C) ; WV=6.3~100V For Capacitor whose Capacitance Exceeds 1000μF The value of D.F.(%) is increased by 2% for every addition of 1000μF .									
	Rated voltage(V)	6.3	10	16	25	35	50~80	100	160~250	315~450
D.F.(%)	60	50	40	25	25	20	15	10*	15	
Low Temperature Stability Impedance Ratio (MAX)	Measurement frequency : 120Hz									
	Rated voltage(V)	6.3~16	25	35	50~63	80~100	160~400	450		
	Z-25°C / Z+20°C	4	3	3	2	2	4	8		
Z-40°C / Z+20°C	15	10	8	6	5					
Endurance	After the capacitors are subjected to DC with the full rated ripple current applied at 105°C for 2000 hours. The following specifications shall be satisfied when the capacitors are restored to 25°C the sum of DC voltage and peak AC voltage must not exceed their full rated voltage									
	Capacitance Change	Within ± 20 % of initial value								
	Dissipation Factor	200% or less of initial specified value								
	Leakage Current	initial specified value or less								
Shelf Life	The following specifications shall be satisfied when the capacitor are restored to 25°C after exposing then for 1000 hours at 105 °C without voltage applied									
	Capacitance Change	Within ± 20 % of initial value								
	Dissipation Factor	150% or less of initial specified value								
	Leakage Current	150% or less of initial specified value								
marking	Printed with white color letter on black sleeve.									

Multiplier for Ripple Current

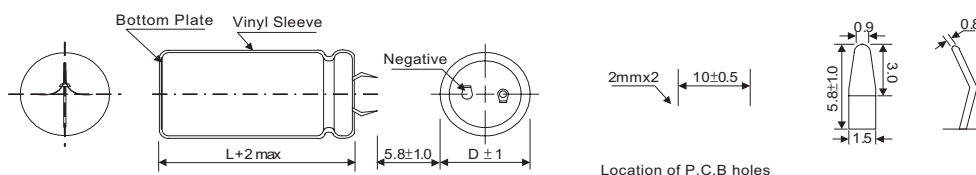
(1) Frequency coefficient

Frequency	50	60	120	1K	10K~100K
6.3~100V	0.88	0.90	1.00	1.15	1.16
160~250V	0.85	0.88	1.00	1.15	1.20
315~450V	0.88	0.9	1.00	1.10	1.15

(2)Temperature coefficient

Temperature(°c)	60	70	85	105
Factor	2.37	2.17	1.67	1.00

Diagram of Dimensions



■ Dimensions, Rated Ripple Current

Capacitance (μF)	Rated (Surge) Voltage							
	6.3 (8)		10 (13)		16 (20)		25 (32)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4700							22x25	1.50
5600							22x30	1.65
							25x25	1.65
6800					22x25	1.55	22x30	1.85
							25x25	1.85
8200					22x30	1.70	22x35	2.10
					25x25	1.70	25x30	2.10
							30x25	2.15
10000			25x25	1.55	22x30	1.95	22x40	2.40
					25x25	1.95	25x35	2.40
							30x30	2.40
							35x25	2.40
12000	22x25	1.55	22x30	1.75	22x35	2.20	22x45	2.70
					25x30	2.25	25x40	2.75
					30x25	2.30	30x30	2.70
							35x25	2.75
15000	22x30	1.70	22x30	1.90	22x40	2.55	25x45	3.15
	25x25	1.70	25x25	1.90	25x35	2.60	30x35	3.15
					30x30	2.60	35x30	3.25
					35x25	2.65		
18000	22x30	1.95	22x35	2.20	22x45	2.90	25x50	3.55
	25x25	1.95	25x30	2.25	25x40	2.90	30x40	3.55
					30x30	2.90	35x35	3.55
					35x25	2.95		
22000	22x35	2.25	22x40	2.50	25x45	3.30	30x45	4.05
	25x30	2.25	25x35	2.55	30x35	3.30	35x35	3.80
	30x25	2.25	30x25	2.45	35x30	3.30		
27000	22x40	2.55	22x50	2.95	25x50	3.80	35x45	4.70
	25x35	2.55	25x40	2.90	30x40	3.75		
	30x30	2.55	30x30	2.85	35x30	3.75		
	35x25	2.55	35x25	2.80				
33000	22x45	2.90	25x45	3.30	30x45	4.30	35x50	5.40
	25x40	2.95	30x35	3.30	35x35	4.25		
	30x30	2.90	35x30	3.30				
	35x25	2.95						
39000	25x50	3.25	25x50	3.70	30x50	4.80		
	30x35	3.25	30x40	3.70	35x40	4.80		
	35x30	3.30	35x30	3.65				
47000	25x50	3.70	30x45	4.20	35x45	5.45		
	30x40	3.70	35x35	3.80				
56000	30x45	4.15	30x50	4.65				
	35x35	4.10	35x40	4.65				
68000	30x50	4.70	35x50	5.50				
	35x40	4.70						
82000	35x45	5.30						

☆Size: $D \times L$ (mm) ☆Ripple Current: A/rms. 105°C, 120Hz

■ Dimensions, Rated Ripple Current

Capacitance (μF)	Rated (Surge) Voltage							
	35 (44)		50 (63)		63 (79)		80 (100)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
820							22x25	1.10
1000							22x30	1.20
							25x25	1.20
1200					22x25	1.20	22x30	1.40
							25x25	1.40
1500					22x30	1.30	22x35	1.60
					25x25	1.30	25x30	1.60
							30x25	1.65
1800			22x25	1.30	22x30	1.50	22x40	1.80
					25x25	1.50	25x35	1.85
							30x25	1.80
2200			22x30	1.55	22x35	1.70	22x45	2.05
			25x25	1.55	25x30	1.75	25x35	2.00
					30x25	1.80	30x30	2.05
							35x25	2.05
2700			22x30	1.70	22x40	2.00	25x45	2.35
			25x25	1.70	25x35	2.00	30x35	2.35
					30x25	1.95	35x30	2.35
3300	22x25	1.40	22x35	1.95	22x50	2.30	25x50	2.70
			25x30	1.85	25x40	2.30	30x40	2.70
					30x30	2.25	35x30	2.55
					35x25	2.10		
3900	22x30	1.55	22x40	2.15	25x45	2.55	30x45	3.00
	25x25	1.55	25x35	2.20	30x35	2.55	35x35	3.00
			30x25	1.95	35x30	2.55		
4700	22x35	1.80	22x45	2.45	25x50	2.85	30x50	3.40
	25x25	1.80	25x40	2.45	30x40	2.85	35x40	3.40
			30x30	2.45	35x30	2.80		
			35x25	2.50				
5600	22x35	1.95	22x50	2.75	30x45	3.20	35x45	3.80
	25x30	1.95	25x40	2.70	35x35	3.20		
	30x25	2.00	30x35	2.75				
			35x30	2.75				
6800	22x40	2.20	25x50	3.30	30x50	3.65	35x50	3.90
	25x35	2.25	30x40	3.30	35x40	3.65		
	30x30	2.30	35x30	3.25				
	35x25	2.35						
8200	22x50	2.55	30x45	3.60	35x45	3.90		
	25x40	2.50	35x35	3.55				
	30x30	2.75						
	35x25	2.75						
10000	25x45	2.85	30x50	4.05	35x50	4.40		
	30x35	2.90	35x40	4.00				
	35x30	2.95						
12000	25x50	3.25	35x45	4.55				
	30x40	3.25						
	35x30	3.15						
15000	30x45	3.70						
	35x35	3.65						
18000	35x40	4.35						
22000	35x50	4.90						

☆Size: D \times L (mm) ☆Ripple Current: A/rms. 105 $^{\circ}$ C, 120Hz

■ Dimensions, Rated Ripple Current

Capacitance (μF)	Rated (Surge) Voltage							
	100 (125)		160 (200)		180 (225)		200 (250)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
150							22x20	0.65
180					22x20	0.75	22x20	0.70
220			22x20	0.80	22x25	0.85	22x25	0.80
							25x20	0.80
270			22x25	1.00	22x25	0.95	22x25	0.85
					25x20	0.90	25x25	0.85
330			22x25	1.20	22x25	1.20	22x30	1.20
			25x20	1.15	22x30	1.10	25x25	1.20
					25x25	1.10		
390			22x30	1.30	22x30	1.30	22x30	1.30
			25x25	1.30	25x25	1.30	22x35	1.30
							25x30	1.30
							30x25	1.30
470			22x30	1.30	22x30	1.30	22x35	1.40
			22x35	1.40	22x35	1.35	22x40	1.40
			25x25	1.40	25x30	1.40	25x30	1.40
					30x25	1.40	30x25	1.50
560	22x25	1.05	22x40	1.50	22x40	1.50	22x45	1.55
			25x30	1.50	25x35	1.55	25x35	1.55
			30x25	1.50	30x25	1.50	30x30	1.55
680	22x25	1.20	22x45	1.70	22x45	1.70	22x50	1.75
			25x35	1.70	22x50	1.70	25x40	1.75
			30x25	1.70	25x35	1.70	30x30	1.75
					25x40	1.75	35x25	1.70
					30x30	1.70		
				35x25	1.70			
820	22x30	1.30	22x50	1.95	22x50	1.95	25x50	2.05
	25x25	1.33	25x40	2.00	25x40	2.00	30x35	2.00
			30x30	2.00	25x45	2.00	35x30	2.05
			35x25	1.90	30x35	2.00		
					35x25	1.90		
1000	22x35	1.50	25x45	2.20	25x45	2.20	30x40	2.30
	25x30	1.50	30x35	2.20	25x50	2.20	30x45	2.30
			35x30	2.20	30x35	2.25	35x30	2.30
					30x40	2.25	35x35	2.30
					35x30	2.25		
1200	22x40	1.70	25x50	2.45	25x50	2.45	30x50	2.60
	25x35	1.70	30x40	2.45	30x40	2.45	35x40	2.65
	30x25	1.70	35x30	2.45	30x45	2.50		
					35x35	2.50		
1500	22x45	1.95	30x45	2.80	30x45	2.80	35x45	3.10
	25x40	2.00	35x35	2.80	30x50	2.90		
	30x30	1.95			35x40	2.90		
	35x25	2.00						
1800	25x45	2.20	30x50	3.30	30x50	3.30	35x50	3.15
	30x35	2.50	35x45	3.30	35x50	3.30		
	35x30	2.45						
2200	25x50	2.55	35x50	3.75	35x50	3.60		
	30x40	2.70						
	35x30	2.55						
2700	30x45	2.90						
	35x35	2.85						
3300	30x50	3.25						
	35x40	3.25						
3900	35x45	3.70						
4700	30x50	3.80						
	35x50	3.80						

 ☆Size: D \times L (mm) ☆Ripple Current: A/rms, 105 $^{\circ}$ C, 120Hz

■ Dimensions, Rated Ripple Current

Capacitance (μF)	Rated (Surge) Voltage							
	250 (300)		350 (400)		400 (450)		450 (500)	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
47					22x20	0.35		
56			22x20	0.40	22x20	0.40	22x25	0.40
68			22x25	0.45	22x25	0.50	22x30	0.50
					25x20	0.50	25x25	0.50
82			22x25	0.55	22x30	0.60	22x35	0.55
			25x20	0.50	25x25	0.65	25x30	0.55
100							30x25	0.55
			22x30	0.70	22x35	0.65	22x40	0.65
			25x25	0.70	25x30	0.65	25x30	0.60
120							30x25	0.65
	22x20	0.60	22x35	0.75	22x35	0.70	22x45	0.70
			25x30	0.75	25x30	0.70	25x35	0.70
			30x25	0.75	30x25	0.75	30x30	0.70
150							35x25	0.70
	22x25	0.65	22x40	0.80	22x40	0.80	22x50	0.80
			25x30	0.80	25x30	0.85	25x40	0.80
			30x25	0.85	25x35	0.85	30x30	0.75
					30x30	0.85	35x25	0.75
180							35x25	0.80
	22x25	0.80	22x45	0.90	22x50	0.95	25x45	0.85
	25x20	0.75	25x35	0.90	25x40	0.95	30x35	0.85
			30x30	0.90	30x30	0.90	35x30	0.85
220								
	22x30	0.95	22x50	1.05	25x45	1.05	25x50	1.00
	25x25	0.95	25x40	1.05	30x35	1.05	30x40	1.00
			30x30	1.00	35x30	1.10	35x30	1.00
270								
			35x25	1.05				
	22x35	1.15	25x45	1.20	25x50	1.20	30x45	1.15
	25x30	1.15	30x35	1.20	30x40	1.20	35x35	1.15
	30x25	1.15	35x30	1.20	35x35	1.20		
330								
	22x40	1.25	30x40	1.35	30x45	1.40	30x50	1.40
	25x30	1.20	35x35	1.35	35x35	1.35	35x40	1.40
390								
	30x25	1.25						
	22x45	1.50	30x45	1.50	30x50	1.55	35x45	1.55
470								
	25x35	1.50	35x35	1.50	35x40	1.55		
	30x30	1.50						
560								
	22x50	1.55	35x40	1.70	30x50	1.75	35x50	1.70
	25x40	1.55			35x45	1.75		
680								
	30x30	1.55						
	35x25	1.55						
820								
	25x45	1.80	35x45	1.90	30x62	1.90	35x60	2.10
	30x35	1.80			35x50	1.90		
1000								
	35x30	1.80						
	25x50	1.95			35x60	2.15		
1500								
	30x40	2.00						
	35x35	2.00						
	30x45	2.15						
	35x35	2.10						
	35x40	2.30						
	35x50	3.63						

☆Size: D \times L (mm) ☆Ripple Current: A/rms. 105 $^{\circ}$ C, 120Hz