

# LGX Series

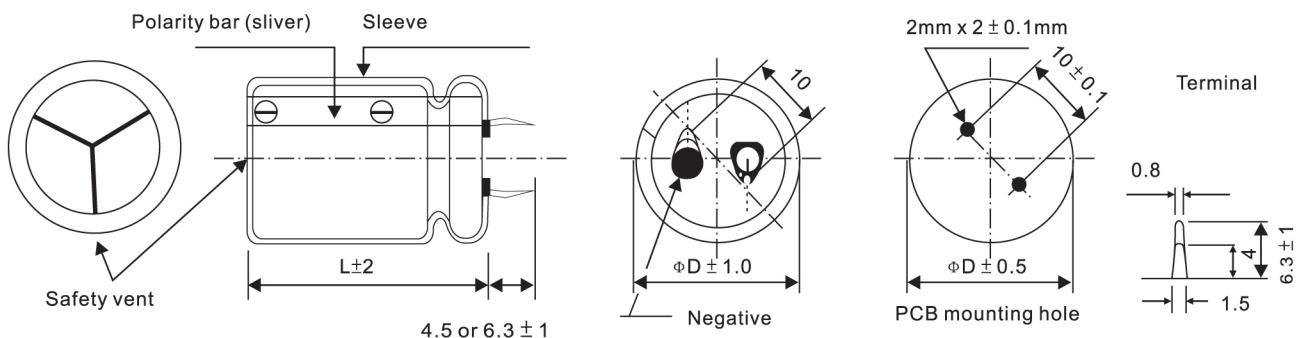
- Withstand high temperature for General purposes
- Endurance: 105°C 2000 hours (紋波疊加)



• 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)	<table border="1"> <thead> <tr> <th>Rated voltage (Vdc)</th> <th>10v</th> <th>16v</th> <th>25v</th> <th>35v</th> <th>50v</th> <th>63v</th> <th>80v</th> <th>100v</th> <th>160v</th> <th>200v</th> <th>250v</th> <th>400v</th> <th>450v</th> </tr> </thead> <tbody> <tr> <td>tan δ (Max.)</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> </tr> </tbody> </table> (at 20°C ,120Hz)		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														
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																															
Low Temperature Characteristics	Impedance ration max at 120Hz <table border="1"> <thead> <tr> <th>Working voltage</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400~450</th> </tr> </thead> <tbody> <tr> <td>Z-25°C/ Z+20°C</td> <td>5</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>8</td> <td>8</td> </tr> <tr> <td>Z-40°C/ Z+20°C</td> <td>15</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>4</td> <td>8</td> <td>10</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		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			
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 2000 hours at 105°C <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>DF (tan δ)</td> <td>≤ 200 % of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </tbody> </table>		Capacitance change	≤ ±20% of the initial value	DF (tan δ)	≤ 200 % of the initial specified value	Leakage current	≤ The initial specified value																																				
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 1000 hours at 105°C without voltage applied. <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>≤ ±20% of the initial value</td> </tr> <tr> <td>DF (tan δ)</td> <td>≤ 200 % of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≤ The initial specified value</td> </tr> </tbody> </table>		Capacitance change	≤ ±20% of the initial value	DF (tan δ)	≤ 200 % of the initial specified value	Leakage current	≤ The initial specified value																																				
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

CAP(μF)	Vdc		10v						16v							
			22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ		
5600																
6800									22*25	1.75						
8200									22*30	2.00						
10000	22*25	1.77							22*30	2.10	25*25	2.05				
12000	22*30	2.10	25*25	1.94					22*35	2.31	25*30	2.30	30*25	2.30		
15000	22*35	2.23	25*30	2.10					22*40	2.68	25*35	2.58	30*30	2.57		
18000	22*40	2.41	25*30	2.34	30*25	2.25			22*50	3.20	25*40	3.16	30*30	2.98		
22000	22*45	2.58	25*35	2.54	30*30	2.50					25*45	3.36	30*35	3.30	35*30	3.25
27000	22*50	3.17	25*40	3.07	30*30	2.95					25*50	3.85	30*40	3.80	35*35	3.93
33000			25*45	3.39	30*35	3.33	35*30	3.21			25*45	4.05	30*45	4.30	35*35	4.27
39000					30*40	3.70	35*35	3.68					30*50	4.81	35*40	4.80
47000					30*45	4.22	35*40	4.16							35*45	5.53
56000							35*45	5.00								

CAP(μF)	Vdc		25v						35v								
			22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ			
2700																	
3300										22*25	1.45						
3900										22*30	1.69						
4700	22*25	1.61								22*35	2.02	25*25	1.62				
5600	22*30	1.80								22*35	2.13	25*30	2.00				
6800	22*35	2.09	22*25	1.87						22*40	2.41	25*35	2.31	30*25	2.31		
8200	22*40	2.31	25*30	2.34	30*25	2.16				22*50	2.85	25*40	2.73	30*30	2.75		
10000	22*45	2.65	25*35	2.61	30*30	2.61						25*45	3.05	30*35	3.05		
12000	22*50	2.80	25*40	2.81	30*30	2.74						25*50	3.37	30*40	3.23	35*30	3.19
15000			25*45	3.27	30*35	3.13	35*30	3.26						30*45	3.72	35*35	3.67
18000					30*40	3.56	35*35	3.84								35*40	4.37
22000					30*45	4.04	35*35	3.75								35*45	4.92
27000							35*45	4.74									

CAP(μF)	Vdc		50v						63v								
			22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ	22φ	25φ	30φ	35φ			
1500										22*30	1.47						
1800	22*25	1.34								22*30	1.58	22*25	1.52				
2200	22*30	1.60								22*35	1.82	25*30	1.75				
2700	22*30	1.70	25*25	1.70						22*40	2.07	25*35	2.11	30*25	1.72		
3300	22*35	1.97	25*30	1.88						22*45	2.33	25*35	2.27	30*30	2.24		
3900	22*40	2.22	25*30	2.20	30*25	1.95						25*40	2.51	30*35	2.55		
4700	22*45	2.43	25*35	2.43	30*30	2.25						25*50	2.97	30*40	2.86	35*30	2.80
5600	22*50	2.75	25*40	2.72	30*30	2.64								30*40	3.32	35*35	3.20
6800			25*45	3.30	30*35	3.30	35*30	3.25						30*50	3.65	35*40	3.65
8200					30*40	3.60	35*35	3.60								35*45	4.04
10000					30*50	4.05	35*40	4.04								35*50	4.48
12000							35*45	4.56									
15000							35*50	4.77									

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

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

Vdc CAP(μF)	80v								100v							
	22φ		25φ		30φ		35φ		22φ		25φ		30φ		35φ	
680									22*25	1.09						
820									22*30	1.32						
1000	22*25	1.19							22*30	1.47	25*25	1.45				
1200	22*30	1.44							22*35	1.69	25*30	1.68				
1500	22*30	1.59	25*25	1.59					22*40	1.97	25*35	1.98	30*25	1.95		
1800	22*35	1.79	25*30	1.71					22*45	2.23	25*40	2.20	30*30	2.20		
2200	22*40	2.03	25*35	1.98	30*25	1.98					25*45	2.53	30*35	2.55	35*30	2.50
2700	22*45	2.39	25*40	2.35	30*30	2.35					25*50	2.82	30*40	2.86	35*35	2.89
3300			25*45	2.64	30*35	2.61	35*30	2.74					30*45	3.30	35*35	3.25
3900			25*50	2.92	30*40	2.82	35*30	2.97					30*50	3.60	35*40	3.67
4700					30*45	3.34	35*35	3.38							35*45	3.80
5600					30*50	3.80	35*40	3.80							35*50	4.05
6800							35*45	3.90								
8200							35*50	4.20								

Vdc CAP(μF)	160v								200v							
	22φ		25φ		30φ		35φ		22φ		25φ		30φ		35φ	
180																
220	22*25	0.92							22*25	0.92						
270	22*25	0.95							22*25	0.99						
330	22*25	1.03							22*30	1.20	25*25	1.20				
390	22*30	1.17							22*35	1.30	25*30	1.34				
470	22*30	1.28	25*25	1.29					22*40	1.44	25*30	1.44	30*25	1.48		
560	22*35	1.45	25*30	1.49					22*45	1.60	25*35	1.60	30*30	1.60		
680	22*40	1.64	25*35	1.70	30*25	1.63			22*45	1.75	25*40	1.76	30*30	1.74		
820	22*45	1.85	25*40	1.92	30*30	1.91			22*50	2.10	25*45	2.10	30*35	2.11	35*30	2.10
1000			25*45	2.17	30*35	2.19			22*50	2.18	25*45	2.26	30*40	2.40	35*35	2.30
1200			25*50	2.43	30*40	2.48	35*30	2.25			25*50	2.50	30*45	2.69	35*35	2.53
1500					30*45	2.82	35*35	2.62					30*50	2.86	35*40	2.97
1800					30*50	3.13	35*40	2.97					35*55	3.25	35*50	3.45
2200							35*45	3.34					35*60	3.35	35*55	3.78

Vdc CAP(μF)	250v								350v							
	22φ		25φ		30φ		35φ		22φ		25φ		30φ		35φ	
120									22*30	0.61	25*25	0.62				
150									22*35	0.73	25*30	0.73				
180	22*25	0.84							22*40	0.83	25*30	0.80	30*25	0.81		
220	22*30	0.97	25*25	0.99					22*45	0.94	25*35	0.92	30*30	0.98		
270	22*35	1.11	25*30	1.15					22*50	1.07	25*40	1.05	30*30	1.03		
330	22*40	1.26	25*30	1.26	30*25	1.31					25*45	1.24	30*35	1.24	35*30	1.18
390	22*45	1.41	25*35	1.42	30*30	1.50					25*50	1.38	30*40	1.39	35*35	1.39
470	22*50	1.58	25*40	1.61	30*30	1.61							30*45	1.57	35*35	1.50
560			25*45	1.80	30*35	1.84							30*50	1.75	35*40	1.69
680			25*50	2.03	30*40	2.09	35*30	1.96							35*45	1.96
820					30*45	2.35	35*35	2.26								

Max ripple current:Arms/120Hz 105°C Size: Dφ x L (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

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

CAP(μF)	400v								450v							
	22φ		25φ		30φ		35φ		22φ		25φ		30φ		35φ	
47																
56									22*25	0.42						
68	22*25	0.49							22*30	0.50	25*25	0.50				
82	22*30	0.56							22*35	0.56	25*30	0.57				
100	22*30	0.62	25*25	0.61					22*40	0.64	25*30	0.63	30*25	0.67		
120	22*35	0.73	25*30	0.73					22*45	0.72	25*35	0.71	30*30	0.77		
150	22*40	0.85	25*35	0.85	30*25	0.79			22*50	0.80	25*40	0.82	30*30	0.85		
180	22*45	0.95	25*35	0.92	30*30	0.95					25*45	0.93	30*35	0.97		
220	22*50	1.08	25*40	1.05	30*35	1.24					25*50	1.05	30*40	1.10	35*30	1.01
270			25*50	1.29	30*40	1.30	35*30	1.18					30*45	1.25	35*35	1.26
330					30*45	1.47	35*35	1.14					30*50	1.42	35*40	1.44
390					30*50	1.64	35*40	1.59							35*45	1.61
470					30*50	1.87	35*45	1.87							35*50	1.80
560							35*50	2.09								
680																

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