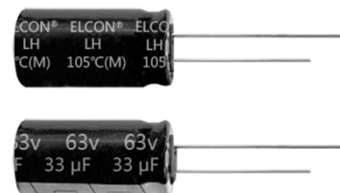


LH

Series

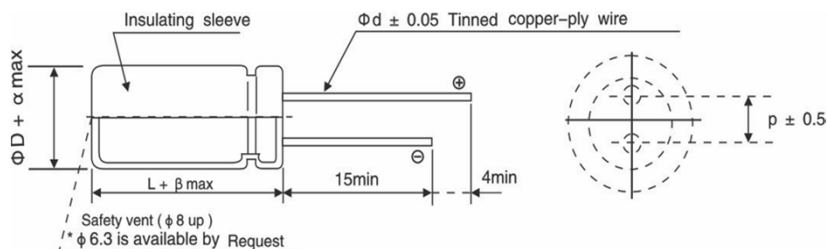
- Load life of 2000 hours at 105°C
- Extended temperature range -40~+105°C
- High ripple current, low impedance



■ SPECIFICATIONS

Item	Characteristics								
Category Temperature Range	-40 ~ +105℃								
Voltage Range	6.3 ~ 100V.DC								
Nominal Cap. Range	6.8 ~ 18000μF								
Capacitance Tolerance	± 20 % (at 120Hz , 20℃)								
Leakage Current	I=0.01CV or 3 μA ,whichever is greater (After 2 minutes). where, I: max.leakage current (μA), C:Nominal capacitance(μF), V:Rated voltage (V) (at 20℃)								
Dissipation Factor (MAX) (tanδ) (at 120Hz ,20℃)	WV	6.3	10	16	25	35	50	63	100
	tanδ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	When nominal capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.								
Low Temp.Impedance Stability at 120Hz	WV		6.3	10	16~25	35~100			
	Z-25℃ / Z+20℃		4	3	2	2			
	Z-40℃ / Z+20℃		8	6	4	3			
Endurance	After 2000 hours application of DC rated working voltage at 105℃ , the capacitor shall meet the following limits:								
	Capacitance change			≤ ±20% of the initial value					
	Dissipation Factor			≤ 200% of the initial specified value					
	Leakage Current			≤ the initial specified value					
Shelf Life	After storage for 1000 hours at 105℃ with no voltage applied, voltage treatment of JIS-C-5102 article 4-4 is to be given and then measurement shall be made, at which time requirement specified in the table "High Temperature Loading" can be met.								

■ DRAWING



Unit: (mm)

ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5			0.6		0.8	
β	1.0			1.5			
α	0.5						

■ MULTIPLIER FOR RIPPLE CURRENT

(1) Frequency Coefficient

Freq.(Hz)	120	1K	10K	100K
Cap.(μF)				
6.8~680	0.49	0.73	0.92	1.00
820~1800	0.60	0.80	0.96	1.00
2200~18000	0.70	0.85	0.98	1.00

(2) Temperature Coefficient

Ambient Temperature(°C)	40	60	70	85	105
Coefficient	2.40	2.10	1.78	1.65	1.00

■ STANDARD RATINGS

<div><div>WV(vdc)</div><div>Parameter</div></div> <div>Cap.(μF)</div>	6.3				<div><div>WV(vdc)</div><div>Parameter</div></div> <div>Cap.(μF)</div>	10			
	ΦDxL (mm)	Impedance		Ripple Current (mA _{rms}) 105℃, 100KHz		ΦDxL (mm)	Impedance		Ripple Current (mA _{rms}) 105℃, 100KHz
		20℃ 100KHz	-10℃ 100KHz				20℃ 100KHz	-10℃ 100KHz	
150	5x11	1.160	4.600	215	100	5x11	1.160	4.600	215
330	6.3x11	0.440	1.740	340	220	6.3x11	0.440	1.740	340
680	8x11.5	0.260	1.040	640	470	8x11.5	0.260	1.040	640
820	10x12.5	0.160	0.640	865	680	10x12.5	0.160	0.640	865
1000	8x16	0.140	0.520	880	1000	10x16	0.120	0.480	1210
1200	10x16	0.120	0.480	1210	1200	10x20	0.092	0.360	1400
1500	10x20	0.092	0.360	1400	1500	10x25	0.084	0.340	1650
1800	13x20	0.089	0.320	1450	2200	13x20	0.070	0.280	1900
2200	13x20	0.080	0.280	1650	3300	13x25	0.054	0.178	2230
2700	13x20	0.075	0.260	1940	4700	16x31	0.045	0.162	2880
3300	13x20	0.070	0.240	1900	5600	16x31	0.040	0.146	3350
4700	13X30	0.048	0.156	2650	6800	18x32	0.038	0.123	3450
5600	16x20	0.046	0.135	2530	8200	18x32	0.030	0.100	4170
6800	16x25	0.042	0.120	2930	10000	18x40	0.028	0.082	4220
10000	16x36	0.030	0.088	3640	12000	18x40	0.024	0.064	4280
18000	18x40	0.024	0.064	4280					

<div><div>WV(vdc)</div><div>Parameter</div></div> <div>Cap.(μF)</div>	16				<div><div>WV(vdc)</div><div>Parameter</div></div> <div>Cap.(μF)</div>	25			
	ΦDxL (mm)	Impedance		Ripple Current (mA _{rms}) 105°C, 100KHz		ΦDxL (mm)	Impedance		Ripple Current (mA _{rms}) 105°C, 100KHz
		20°C 100KHz	-10°C 100KHz				20°C 100KHz	-10°C 100KHz	
56	5x11	1.160	4.600	215	47	5x11	1.160	4.600	215
120	6.3x11	0.440	1.740	340	100	6.3x11	0.440	1.740	340
330	8x11.5	0.260	1.040	640	220	8x11.5	0.260	1.040	640
470	10x12.5	0.174	0.700	865	330	10x12.5	0.160	0.640	865
680	10x16	0.138	0.540	1210	470	10x16	0.120	0.480	1210
1000	10x20	0.092	0.360	1400	680	10x20	0.092	0.360	1400
1500	13x20	0.075	0.260	1720	820	10x25	0.084	0.340	1650
2200	13x25	0.054	0.178	2230	1000	13x20	0.070	0.240	1900
2700	16x20	0.049	0.140	2530	1200	13X25	0.064	0.190	2210
3300	16x31	0.040	0.100	2880	1500	13x25	0.054	0.178	2230
4700	16x31	0.036	0.065	3450	2200	16x25	0.050	0.162	2860
5600	18x32	0.034	0.050	4170	2700	16x25	0.042	0.120	2930
6800	18x36	0.030	0.040	4200	3300	18x25	0.036	0.100	3140
8200	18x36	0.028	0.038	4220	4700	18x36	0.028	0.085	4080
10000	18x40	0.024	0.032	4280	5600	18x40	0.024	0.064	4280

STANDARD RATINGS

WV(vdc) Parameter Cap.(μF)	35				WV(vdc) Parameter Cap.(μF)	50			
	ΦDxL (mm)	Impedance		Ripple Current (mArms) 105℃, 100KHz		ΦDxL (mm)	Impedance		Ripple Current (mArms) 105℃, 100KHz
		20℃ 100KHz	-10℃ 100KHz				20℃ 100KHz	-10℃ 100KHz	
33	5x11	1.160	4.600	215	22	5x11	1.400	5.600	180
56	6.3x11	0.440	1.740	340	56	6.3x11	0.600	2.400	295
150	8x11.5	0.320	1.520	640	100	8x11.5	0.340	1.360	555
220	10x12.5	0.160	0.640	865	120	8x11.5	0.330	1.200	580
330	10x16	0.100	0.480	1210	150	10x12.5	0.240	0.960	760
470	10x20	0.080	0.360	1400	180	10x16	0.189	0.820	910
560	13x20	0.084	0.340	1650	220	10x16	0.168	0.680	1050
680	13x20	0.070	0.240	1900	330	10x20	0.120	0.450	1390
1000	13x25	0.054	0.178	2230	470	13x20	0.090	0.300	1660
1200	16x20	0.049	0.152	2530	560	13x25	0.068	0.220	1950
1500	13x35	0.040	0.130	2880	680	13X30	0.065	0.210	2180
1800	16x25	0.042	0.120	2930	820	16x20	0.068	0.200	2210
2200	18x25	0.038	0.100	3140	1000	18x20	0.052	0.180	2490
2700	18x32	0.032	0.092	4170	1200	18x25	0.045	0.140	2740
3300	18x36	0.027	0.078	4220	1500	16x36	0.038	0.114	3150
3900	18x40	0.024	0.064	4280	1800	18x32	0.042	0.114	3635
					2200	18x36	0.034	0.092	3680
					2700	18x40	0.028	0.076	3800

<div><div>WV(vdc)</div><div>Parameter</div><div>Cap.(μF)</div></div>	63				<div><div>WV(vdc)</div><div>Parameter</div><div>Cap.(μF)</div></div>	100			
	ΦDxL (mm)	Impedance		Ripple Current (mArms) 105℃, 100KHz		ΦDxL (mm)	Impedance		Ripple Current (mArms) 105℃, 100KHz
		20℃ 100KHz	-10℃ 100KHz				20℃ 100KHz	-10℃ 100KHz	
15	5x11	3.600	14.600	62	6.8	5x11	3.600	14.600	62
33	6.3x11	2.000	8.200	126	15	6.3x11	2.000	8.200	126
56	8x11.5	1.000	4.400	260	47	8x11.5	0.680	2.800	325
82	10x12.5	0.720	3.400	325	68	10x16	0.500	2.400	400
120	10x16	0.500	2.400	400	82	10x20	0.340	1.520	518
180	10x20	0.340	1.520	518	100	10x20	0.330	1.370	565
220	10x20	0.330	1.370	568	120	13x20	0.260	1.040	765
330	13x25	0.192	0.720	875	150	13x20	0.220	1.040	895
470	16x20	0.154	0.640	1130	180	13x25	0.192	0.720	875
560	16x25	0.124	0.460	1350	220	16x20	0.154	0.640	1130
680	18x20	0.144	0.540	1300	330	18x20	0.144	0.540	1300
820	18x25	0.104	0.380	1560	470	18x32	0.084	0.300	1720
1000	18x32	0.084	0.300	1720	560	18x36	0.072	0.260	2130
1200	18x36	0.072	0.260	1890	680	18x36	0.072	0.260	1890
1500	18x40	0.064	0.240	2470	820	18x40	0.064	0.240	2470