

## LY Series Aluminum Electrolytic Capacitor

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#### ◆ Feature

##### Feature

- \*  $f_r$  : 105°C 4000~10000 Hz
- Load life: 105°C 4000~10000 hours
- \*  $Z_{ESR}$  : Ultra low impedance.
- \* # \$ RoHS Compliant to the RoHS Directive

#### ◆ Application

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- \* ( & ) \* + , - ° . / ° 0 1
- Ideally designed for all kinds of

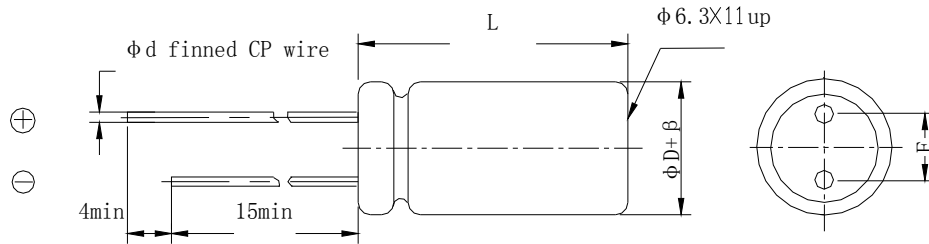
#### ◆ Part Number

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8 2 2 0 L F

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Code	Voltage
LO	4
LA	6.3
LB	10
LC	16
LD	25

**◆ 1 2 WX**
**Product Structure**


$\beta$ (mm)	$\pm 0.5$			$\pm 1.0$				
$\Phi D$ (mm)	5	6.3	8	10	12.5	16	18	22
$F \pm 0.5$ (mm)	2.	2.5	3.5	5.0		7.5		10.0
$\Phi d \pm 0.1$ (mm)	0.5		0.6			0.8		
L(mm)	11,12		12,16	12,16,	16,20,25	16,20,25,30,35	20,25,30,35,40	25,30,35,40
	$L \pm 2.0$							

**◆ Y Z I [ 5**
**Main specifications**

\ ] Item	Y Z I [ Performance Characteristics								
$\wedge \_ \backslash a \circ ; b c$ Rated Voltage Range	6.3~100V.DC								
$d \& e f b c$ Operating Temperature Range	-40G ~+105G								
$> ? g \circ \cdot @ b c$ Nominal Capacitance Range	0.47~18000h F								
$g \circ \cdot @ i j k E$ Capacitance Tolerance	$\pm 20\%l$ Mm +25°Cm 120Hzn								
$o \circ p$ Leakage Current (25°C)	$\wedge \_ \backslash a \circ ; (V)$ Rated working voltage	6.3~100							
	$o \circ p$ Leakage current	2 q r s $I \leq 0.01CV t$ 3( $\mu A$ ), u v w x After 2 min. $I \leq 0.01CV$ or 3( $\mu A$ ), Whichever is greater.							
$Cy > ? g \circ \cdot @ l \mu F n$ Nominal Capacitance in $\mu F$ $Vy \wedge \_ \backslash a \circ ;   V n$ Rated working voltage in V									
$z \{   \} \sim DF$ Dissipation Factor	$\wedge \_ \backslash a \circ ; (V)$ Rated working voltage	6.3	10	16	25	35	50	63	100
	DF(MAX) (20°C, 120Hz)	0.18	0.16	0.14	0.12	0.12	0.10	0.09	0.08
$\epsilon \circ @ x w) 1000\mu F t m, f \circ, 1000\mu F m DF x \circ, 0.02$ For capacitance of more than 1000 $\mu F$ , add 0.02 for every increase of 1000 $\mu F$ .									

Surge Voltage	Rated working voltage (V)	6.3	10	16	25	35	50	63	100
	Surge voltage (V)	8	13	20	32	44	63	79	125
Temperature Stability	Rated working voltage (V)	6.3	10	16	25~100				
	Impedance Ratio (120Hz)	z-25°C/z+25°C	4	3	2	2			
		z-40°C/z+25°C	8	6	4	3			
Load life	<p>After application of rated working voltage with max permissible ripple current specified at +105°C for 4000~10000 hours, capacitors meet the characteristics requirements measured at +20°C listed at below:</p> <p>Capacitance change: <math>\pm 25\%</math> initial measured value</p> <p>Leakage current: <math>\leq</math> initial specified value</p> <p>Dissipation factor: <math>\leq 200\%</math> initial specified value</p>								
	Life Time (hrs)	Case Dia							
		$\Phi D \leq 8$	4000	5000					
		$\Phi D = 10$	6000	7000					
		$\Phi D \geq 12.5$	8000	10000					
Shelf life	<p>After leaving capacitors under no load at +105°C for 1000 hours, According to JIS-C-5101-4, apply the rated DC voltage for 30 minutes and store the capacitors under room temperature for 24-48 hours. The capacitors meet the characteristics listed as below:</p> <p>Capacitance change: <math>\pm 20\%</math> initial measured value</p> <p>Leakage current: <math>\leq</math> initial specified value</p> <p>Dissipation factor: <math>\leq 200\%</math> initial specified value</p>								

◆ Dimensions and ripple current and frequency coefficient

• - ° p μ C ¶ 0

Ripple current frequency coefficient

Cap(μF) \ Freq Hz	50 (60)	100 (120)	1K	10K	≥100K
6.8~33	0.30	0.42	0.70	0.90	1.00
39~270	0.35	0.50	0.73	0.92	1.00
330~680	0.40	0.55	0.77	0.94	1.00
820~1800	0.45	0.60	0.80	0.96	1.00
2200~18000	0.50	0.70	0.85	0.98	1.00

BC5 · i j · - ° p

Dimensions and ripple current



390	10×25	0.055	1500	12.5×20	0.10	1500	12.5×16 12.5×20	0.095 0.09	750 1200	12.5×35 16×25	0.045 0.04	1660 2900
470	10×30	0.043	1690	12.5×20	0.09	780	12.5×25 16×20 16×25	0.09 0.075 0.065	1000	16×30	0.040	1900
	12.5×16	0.08	1500	12.5×20	0.09	1400			16×35	0.040	1900	
	12.5×20	0.045	1660	12.5×30	0.080	1300			18×25	0.045	1900	
	16×16	0.065	1660									
560	12.5×16	0.07	1950	12.5×20	0.09	1000	18×20	0.062	2030	18×35	0.036	2130
	12.5×20	0.07		12.5×35	0.065	2000						
	12.5×25	0.034		12.5×25	0.065	1350						
				16×20	0.065	1350						
				16×25	0.062	1350						
680	10×30	0.045	1950	12.5×25	0.028	2310	16×30	0.05	1500	16×40	0.05	1890
	12.5×30	0.030	2310	16×20	0.072	1300				18×30	0.04	
				16×25	0.072	1300				18×35	0.036	
				18×20	0.072	1300						
820	12.5×25	0.03	2300	12.5×35	0.07	1500	16×30	0.05	1500	18×40	0.032	2470
	12.5×35	0.025	2570	12.5×40	0.055	1600						
	16×20	0.035	2570	16×30	0.049	1650						
1000	12.5×20,25	0.065	2555	16×25	0.05	1900	16×30	0.05	1500			
	16×25	0.025		16×35	0.040							
1200	16×30	0.022	3010	18×35	0.036	1890						
1500	16×35	0.019	3150	18×30	0.03	2470	16×40	0.025	3600			
				18×40	0.032		18×40	0.018				
							22×30	0.03				
1800	18×30	0.021	3635	18×30	0.03	2470						
				18×40	0.032							
2200	18×35	0.017	3680	18×40	0.038	3860						
2700	18×40	0.014	3800									

(1)  $\phi$  B C Case Size D×L(mm)

(2) 100KHz  $\omega$  x Impedance at 100KHz +20°C ( $\Omega$ )

(3)  $i_{j \cdot p}$  Max allowable ripple current (mA rms, +105°C, 100KHz)

◆<sup>1</sup> N

Packaging

\* R S 1 2 1 N § b · ° @ Taped packaging quantity

$\phi$	° @ (°)	L(° . ° f ) ≤ 22mm		L(° . ° f ) ¼ 25±2mm	
		L×W×H(mm)		L×W×H(mm)	
$\phi$ 5	2000				

\* MN 2 1 N ° @ Bulk packaging quantity

ΦD(mm) Diameter	L(mm) Length	Quantity   pcs/bagn	1/2/3/4 bag/box	F 2 /© 2 Inner box/outer box	(» /2 ) psc/box
Φ4	7-8	1000	15	4	60000
Φ5	5-7	1000	12	4	48000
Φ5	11	1000	10	4	40000
Φ6.3	5-7	1000	10	4	40000
Φ6.3	8-15	1000	8	4	32000
Φ6.3	15-20	1000	6	4	24000
Φ8	5-12	500	8	4	16000
Φ8	14-16	500	8	4	16000
Φ8	20	500	6	4	12000
Φ10	9-13	500	6	4	12000
Φ10	14-16	250	8	4	8000
Φ10	17-20	250	8	4	8000
Φ10	25-30	200	8	4	6400
Φ10	31-35	200	6	4	4800
Φ12-Φ13	16-28	200	6	4	4800
Φ12-Φ13	30-40	100 00d	8	4	3200
Φ12-Φ13 0	45-55	100	6	4	2400
Φ16	15-20 0	100	8	4	3200
Φ16	21-30	100	6	4	2400
Φ16	31-40	50 0	10		

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0