

# SPECIFICATION

## APPROVAL SHEET



**CUSTOMER:**  
**PRODUCTS:** LL series - DC-link capacitor  
**CATEGORY:** 650µF 600Vdc  
**ORDERING CODE:** 657J601D51301  
**CUSTOMER CODE:**  
**DATE:** Oct 26<sup>th</sup>, 2022 (Ver 0)

承認印/APPROVAL STAMP			
供方 /VENDER		客戶 /CUSTOMER	
Design	Audit		
Y.J.Z Oct 26 <sup>th</sup> , 2022	GC.Y Oct 26 <sup>th</sup> , 2022		

### Specification Revisions:

Revision Level	Revision Change	Date	Initials

## CABO ELECTRONICS(FOSHAN) LIMITED

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### A Hi-Reliability capacitor brand of China

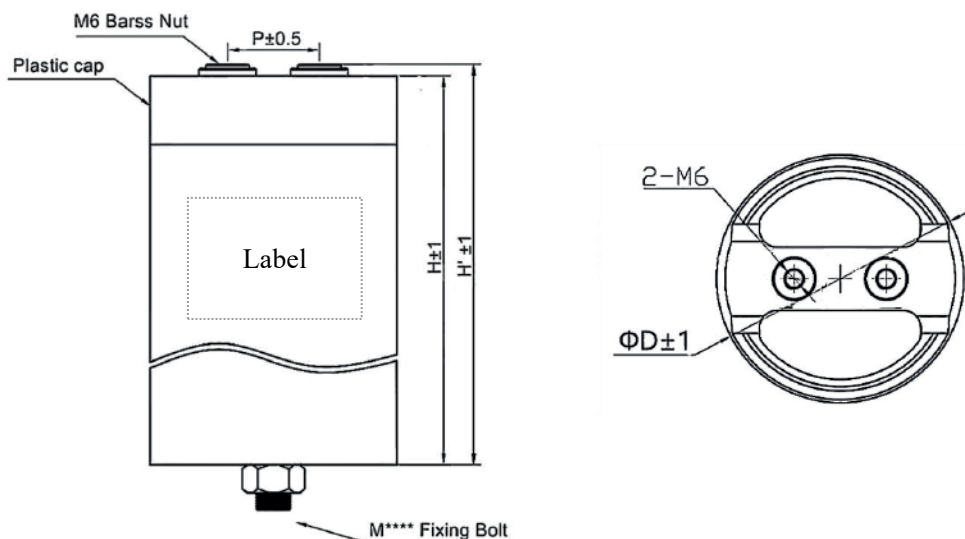
Failure Rate ≤50FIT | 100% Tested Before Delivery



技術圖紙請勿外傳！該產品引用了多項自主技術專利，CABO 保留追究一切技術圖紙外流導致損失的權利。  
 Confidential and invention patents are contained in CABO solution, disclosure or distribution of this specification is prohibited.

### LL series - DC-link Capacitor

650 $\mu$ F600Vdc Ordering code: 657J601D51301



Diameter (D)	Height (H)	Height'(H')	Pitch (P)	M****
86	100	105	32	M12*16

Dimensions in mm, unspecified dimensions tolerance  $\pm 1$ mm

LL series are aluminum can capacitor with PU and epoxy sealed. Special designed for dc link and filtering application. Can be used into industrial control, VFD, solar inverter, power supply etc.

### 技術參數 Technical specification

Electrical Characteristics	
Capacitance (C <sub>n</sub> )	650 $\mu$ F
Capacitance tolerance	$\pm 5\%$ (J)
Rated voltage (U <sub>n</sub> )	600Vdc
RMS current (I <sub>rms</sub> )	65A
Peak current (I <sub>p</sub> )	5.2kA dv/dt > 10V/ $\mu$ s
ESR	$\leq 1.9\text{m}\Omega$ @1kHz
Dissipation factor	Tan $\theta \leq 0.002$ @100Hz
ESL	$\leq 40\text{nH}$
Insulation Resistance (R <sub>i</sub> )	R <sub>i</sub> x C $\geq 10000\text{s}$
Operating Temperature (T <sub>w</sub> )	-40~+105 $^{\circ}$ C*
Work life	>100,000Hours (U <sub>n</sub> , $\theta_{h.s} \leq 70^{\circ}$ C)
Humidity (RH)	0~95%
Altitude	<4000m
Protection level	P0





# SPECIFICATION

承認書

**CABONIX**

Mechanical and test parameters		
Test voltage - terminals (U <sub>tt</sub> )		900Vdc 10s
Test voltage - terminal/case (U <sub>tc</sub> )		3000Vac 10s
Enclosure material		Aluminum shell
Electrode terminals		2*M6 nuts
Cooling mode		Nature cooling
Fire resistance		UL 94 V-0
Max torque on terminals		3.5 N.M (M6)
Max.Torque of bolt		8.0 N.M (M12)

\* +85°C to +105°C: decreasing factor 1.5% per °C for Un(dc)

## 引用標準 Reference standard

IEC61071-1/2 , IEC60664-1:2007, JB/T8168-1999 ,UL810 , UL94

## 包裝與運輸 Packing and shipment

The capacitors are packed into a cardboard box, any kinds of shipment are permitted. But the sprinkle of rain or snow and mechanical damage must be avoided.

## 標識 Marking

The capacitor is marked by laser print or stamp or adhesive label, With following information:

- 1.Rated capacitance value(650μF)
- 2.Rated voltage(600Vdc)
- 3.Tolerance on rated capacitance(J : ±5%)
- 4.Part number(Code for ordering 657J601D51301)
- 5.Trace code and serial number(MFR-WEEK-SN)



## 提醒和警示 Cautions and Warnings

- (1) The capacitor have not discharge resistors between terminals,so the energy stocked in the capacitor may be lethal,before handle capacitors please discharge through resistor, short-circuit the capacitor is not permit.
- (2) Check thickness of the connections/terminals periodically.
- (3) Do not use or store capacitors in corrosive atmosphere,especially where chloride gas,sulfide gas,acid,alkali,salt or the like are present.In the dusty environment regular maintenance and cleaning especially of the terminals is required to avoid conductive path between phases.
- (4) All the data measured at Room Temperature(R.T. 23±8°C) unless otherwise specified.
- (5) CABO is not responsible for any damages,which are caused by the improper installation and application,Before using the capacitor in any application,please read carefully this technical data-sheet.
- (6) Specifications are subject to change without prior notice.Don't hesitate to contact us for any doubts and more detail information.

