# **SPECIFICATION**

## APPROVAL SHEET



**CUSTOMER:** 

PRODUCTS: LM series - DC link capacitors

CATEGORY: 15µF 800Vdc

<u>ORDERING CODE:</u> 156K801D21101

CUSTOMER CODE:

DATE: Dec 3<sup>rd</sup>, 2022 (Ver 0)

承認印/APPROVAL STAMP					
供 方 /VENDER		客戶/CUSTOMER			
Design	Audit				
J.D Dec.3 <sup>rd</sup> 2022	GQ.Y Dec.3 <sup>rd</sup> , 2022				

**Specification Revisions:** 

Revision Level	Revision Change	Date	Initials
	4		

### CABO ELECTRONICS(FOSHAN) LIMITED

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A Hi-Reliability capacitor brand of China NFIDENT

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損失的權利。 Confidential and invention patents are contained in CABO solution, disclosure or distribution of this specification is prohibited.

#### **SPECIFICATION**

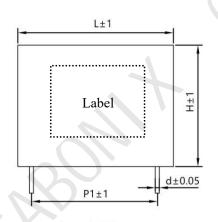


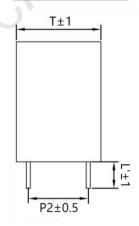
承認書

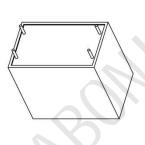
**CABONIX** 

# LM series DC link Capacitor

### 15µF800Vdc Ordering code:156K801D21101







) L	Т	Н	P1	P2	d	Ľ'
42	20	40	37.5	10.2	1.2	4

Dimensions in mm, unspecified dimensions tolerance ±1mm

### 技術參數 Technical specification

Capacitance (Cn)       15μF         Capacitance tolerance       ±10%(K)         Rated Voltage(Un)       800Vdc         Max RMS Current (Irms)       10.5A @10KHz,70°C         Peak Current (Ipeak)       600A (dv/dt≥40V/μs)         ESR       ≤7mΩ @10kHz         Dissipation Factor (Tanδ)       tgδ≤0.0012 @1kHz         Ls       <15nH         Operating Temperature (Tw)       -40~85°C (Hotpot ≤105°C)*         Storage Temperature (Ts)       -40~85°C**         Insulation Resistance (Ri)       R×C>100000s         Work life       >100,000Hours @Un, ≤70°C         Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Electrical Characteristics				
Rated Voltage(Un)800VdcMax RMS Current (Irms)10.5A @10KHz,70℃Peak Current (Ipeak)600A (dv/dt≥40V/μs)ESR≤7mΩ @10kHzDissipation Factor (Tanδ) $tgδ≤0.0012$ @1kHzLs<15nH	Capacitance(C <sub>n</sub> )	15µF			
Max RMS Current (Irms)10.5A @10KHz,70°CPeak Current (Ipeak)600A (dv/dt≥40V/μs)ESR≤7mΩ @10kHzDissipation Factor (Tanδ)tgδ≤0.0012 @1kHzLs<15nH	Capacitance tolerance	±10%(K)			
Peak Current (Ipeak)       600A (dv/dt≥40V/μs)         ESR       ≤7mΩ @10kHz         Dissipation Factor (Tanδ)       tgδ≤0.0012 @1kHz         Ls       <15nH	Rated Voltage(U <sub>n</sub> )	800Vdc			
ESR       ≤7mΩ @10kHz         Dissipation Factor (Tanδ) $tgδ≤0.0012$ @1kHz         Ls       <15nH	Max RMS Current (Irms)	10.5A @10KHz,70℃			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Peak Current (Ipeak)	600A (dv/dt≥40V/µs)			
Ls <15nH	ESR	≤7mΩ @10kHz			
Operating Temperature (Tw)       -40~85°C (Hotpot ≤105°C)*         Storage Temperature (Ts)       -40~85°C**         Insulation Resistance (Ri)       R×C>10000s         Work life       >100,000Hours @Un, ≤70°C         Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Dissipation Factor (Tanδ)	tgδ≤0.0012 @1kHz			
Storage Temperature (Ts)       -40~85°C**         Insulation Resistance (Ri)       R×C>10000s         Work life       >100,000Hours @Un, ≤70°C         Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Ls	<15nH			
Insulation Resistance (Ri)       R×C>10000s         Work life       >100,000Hours @Un, ≤70 °C         Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Operating Temperature (T <sub>w</sub> )	-40~85°C (Hotpot ≤105°C)*			
Work life       >100,000Hours @Un, ≤70°C         Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Storage Temperature (T <sub>s</sub> )	-40~85℃**			
Humidity (RH)       0-95%         Altitude       ≤3500m         Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Insulation Resistance (R <sub>i</sub> )	R×C>10000s			
Altitude ≤3500m  Mechanical and Test Parameter  Test voltage between terminals 1200Vdc 10s  Test voltage between terminal/case 3000Vac 60s  Shell material Frame-retardant plastic shell  Sealing materials Epoxy resin  Dielectric medium Metallized polypropylene film  Failure Rate ≤50Fit	Work life	>100,000Hours @U <sub>n</sub> , ≤70°C			
Mechanical and Test Parameter         Test voltage between terminals       1200Vdc 10s         Test voltage between terminal/case       3000Vac 60s         Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Humidity (RH)	0-95%			
Test voltage between terminals  Test voltage between terminal/case  Shell material  Sealing materials  Dielectric medium  Failure Rate  1200Vdc 10s  3000Vac 60s  Frame-retardant plastic shell  Epoxy resin  Metallized polypropylene film  ≤50Fit	Altitude	≤3500m			
Test voltage between terminal/case  Shell material  Sealing materials  Dielectric medium  Failure Rate  3000Vac 60s  Frame-retardant plastic shell  Epoxy resin  Metallized polypropylene film  ≤50Fit	Mechanical and Test Parameter				
Shell material       Frame-retardant plastic shell         Sealing materials       Epoxy resin         Dielectric medium       Metallized polypropylene film         Failure Rate       ≤50Fit	Test voltage between terminals	1200Vdc 10s			
Sealing materials Epoxy resin  Dielectric medium Metallized polypropylene film  Failure Rate ≤50Fit	Test voltage between terminal/case	3000Vac 60s			
Dielectric medium  Metallized polypropylene film  Failure Rate  ≤50Fit	Shell material	Frame-retardant plastic shell			
Failure Rate ≤50Fit	Sealing materials	Epoxy resin			
	Dielectric medium	Metallized polypropylene film			
Fire registance	Failure Rate	≤50Fit			
File resistance OL94 V-0	Fire resistance	UL94 V-0			

<sup>+85°</sup>C to +105°C (case): decreasing factor 1.5% per °C for Un(dc)

#### **SPECIFICATION**



承認書

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#### 引用標準 Reference standard

IEC60664-1:2007, IEC61071-1/2, UL94, CABO standard

#### 包裝與運輸 Packing and shipment

For the packing box with capacitor, any kinds of shipment are permitted. But the sprinkle of rain or snow and mechanical damage must be avoided.

#### 標識 Mark

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

- 1.Rated capacitance value(15µF)
- 2.Rated voltage(800Vdc)
- 3. Tolerance on rated capacitance(K: ±10%)
- 4.Part number(Code for ordering 156K801D21101)
- 5.Trace code and serial number(MFR-WEEK-SN)



LM

15µF±10% 800Vdc 156K801D21101 MFR-WEEK-SN

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#### 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.