



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Type CDLC Axial 3000 F, Ultracapacitors

## Large Cylindrical Type 3000 F



This leading edge large cell ultracapacitor, with low RC time constants, offers flexible mounting with two M6 thread holes on each end in weldable terminals. They are especially suited for back-up and pulse power applications such as grid stabilization and wind turbine pitch control. When assembled into modules, the low connection resistance design excels in transportation applications like automotive subsystems, rail system power and utility vehicles.

### Highlights

- Maximum Power Performance at 3000 Farads
- Very Low ESR
- Low Thermal Resistance (4 °C/W)

### Specifications

Operating Temperature Range	-40 °C to +65 °C
Storage Temperature Range	-40 °C to +70 °C
Rated Voltage Range	2.7 Vdc, 2.85 Vdc rated surge
Capacitance Range	3000 F
Capacitance Tolerance	0% / +10%
Life at Room Temperature	10 years at rated voltage and 25 °C Capacitance change ≤20% ESR change ≤100%
Life Test	1000 h @ rated voltage and +65 °C Capacitance change ≤20% decrease from initial specified value ESR change ≤100% increase from initial specified value
Cycle Test	>1,000,000 cycles (rated to half rated voltage at +25 °C) Capacitance change ≤20% ESR change ≤100%
Shelf Life	1000 h without voltage at +70 °C Capacitance change ≤20% from min. initial capacitance ESR change ≤100% from max. initial ESR
RoHS Compliant	

### Ratings

Part Number	CDLC302P2R7LR
Terminal Configuration	Axial M6 Threaded Tap
<b>Capacitance (F)</b> (Discharge w constant current at 25 °C)	3000
<b>ESR, DC (mΩ), Max</b>	0.26
<b>Current - Max Peak (A)</b> (1 s discharge rate to 50% of rated Voltage)	2300
<b>Leakage current (mA), Max</b> after 72 h at +25 °C	5
<b>Usable Power Density, Pd (W/kg)</b> (Per IEC 62391-2)	6600
<b>Usable Power (W)</b>	3365
<b>Impedance match power, (W/kg)</b>	16200
<b>Gravimetric energy density, Emax (Wh/kg)</b>	6.0
<b>Energy available (Wh)</b> (At rated voltage)	3.04
<b>Weight (kg)</b>	0.51
<b>Maximum Continuous Current (Arms)</b> (for +20 °C temperature rise)	145
<b>Short circuit current (A)</b>	10,000



**Notice and Disclaimer:** All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

OBSOLETE