LSUC 003R0C 3400F NH

The Ultracapacitor, also known as double-layer capacitor, stores energy by means of a static charge as opposed to a battery

It is used for energy storage applications which undergo very frequent charge and discharge cycles at high current and short duration. Its life can be as high as one million cycles. It features a wide operating temperature range, making it an ideal energy storage device for extreme environments.

It can be applied in wind power, hybrid systems, industrial automation, power backup and stabilization. Imagination is its only boundary.



PERFORMANCE SPECIFICATIONS

Rated Voltage(Nominal)	3.0 V
Surge Voltage	3.2 V
Capacitance	3400 F
Capacitance Tolerance	-0% / + 5%
Max. ESR DC	0.23 mΩ
Typical ESR DC ¹	0.20 mΩ
Total Energy	4.25 Wh
Max. Current ²	2.8 kA
Leakage Current ²	< 8 mA

¹Internal control value

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	−40°C to 65°C
Operating Humidity (RH)	Up to 95%, condensing
Storage Conditions	−20°C to 25°C Up to 85% RH

LIFE INFORMATION

Endurance Life (65 °C)	1500hr
Capacitance Change ³	< 20%
ESR DC Change ⁴	< 100%
Projected Life (25 °C)	10 Years
Capacitance Change ³	< 20%
ESR DC Change ⁴	< 100%
Projected Cycle Life (25 °C) ⁵	1,000,000 Cycles
Capacitance Change ³	< 25%
ESR DC Change ⁴	< 100%
Shelf Life (25 °C) ⁶	4 Years

³ Decrease from minimum Capacitance value

THERMAL SPECIFICATIONS

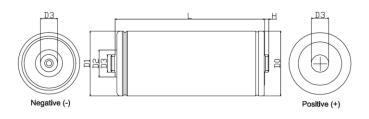
Max. Continuous Current ΔT =15 $^{\circ}$ C ⁷	150 A
Max. Continuous Current ΔT =40 $^{\circ}$ C ⁷	245 A
Thermal Capacitance (kJ/°C) ⁸	0.60
Thermal Resistance (°C/W) ⁸	4.81

⁷Initial state value.

MECHANICAL SPECIFICATIONS9

D0	$ \emptyset $ 60 \pm 1.0 mm			
D1	Ø 60.7 ± 0.7 mm			
D2	Ø 25 ± 0.1 mm			
L	138 ± 0.5 mm			
Mount Options	ST01	WT01	LT01	LT02
D3	M16, P1.0	Ø 14	M16, P2.0	M12, P1.75
Н	4±0.1	3.18± 0.1	14	14
Weight	515 g	515 g	520 g	520 g
Safety Vent	Side Notch	1		

⁹ Dimensions and weight may differ with terminals and it may change without notice.



COMPLIENCE SPECIFICATIONS

Certifications	UL MH46367, Vol 1
Environmental	RoHS Directive 2011/65/EU REACH
Shock & Vibration	IEC 60068-2-27 : 2008 IEC 60068-2-6 : 2007





 $^{^2{\}mbox{The}}$ stated maximum peak current should not be used in normal operation and is only provided as a reference value.

⁴ Increase from Max. ESR value.

 $^{^{\}rm 5}\,\rm Cycle$ Life may vary for different working conditions. (e.g. voltage or temperature)

⁶ Stored uncharged state under appropriate storage conditions.

⁸The specification is calculated under limited conditions.