LSUC 003R0C 3000F 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. 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	3000 F
Capacitance Tolerance	-0% / + 20%
Max. ESR DC	0.23 mΩ
Typical ESR DC[1]	0.20 mΩ
Total Energy	3.75 Wh
Max. Current[2]	2.6 kA
Leakage Current[2]	< 7 mA

[1] Internal control value
[2] The stated maximum peak current should not be used in normal operation and is only provided as a reference 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]	< 20%
ESR DC Change[4]	< 100%
Shelf Life (25 ℃) [6]	4 Years

[3] Decrease from minimum Capacitance value.
[4] Increase from Max. ESR value.
[5] Cycle Life may vary for different working conditions. (e.g. voltage or temperature)
[6] Stored uncharged state under appropriate storage conditions.

THERMAL SPECIFICATIONS

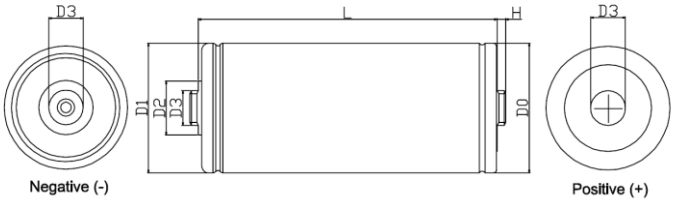
Max. Continuous Current △T=15 °C[7]	150 A
Max. Continuous Current △T=40 °C[7]	245 A
Thermal Resistance (°C/W)[8]	2.90

[7] Initial state value.
[8] The specification is calculated under limited conditions.

MECHANICAL SPECIFICATIONS[9]

D0	Ø 60 ± 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
H	4±0.1	3.18± 0.1	14	14
Weight	515 g	515 g	520 g	520 g
Safety Vent	Side Notch			

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



COMPLIANCE SPECIFICATIONS

Certifications	UL MH46367 Vol1
Environmental	RoHS Directive 2011/65/EU REACH
Shock & Vibration	IEC 60068-2-27 : 2008 IEC 60068-2-6 : 2007

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