



Document Number V02\_170117

# Product Specification

LSUC 02R85C 3000F EA  
LSUC 02R85C 2000F EA  
LSUC 02R85C 1500F EA  
LSUC 02R85C 1200F EA  
LSUC 02R85C 0650F EA



# Product Specification

## ■ Features

High Power and Long-Term Reliability feature  
If LS Ultracapacitor enables this component to use in various applications as backup power unit, auxiliary power unit, instantaneous power compensation, peak power compensation and energy storage as well.



## ■ Specification

Rated Voltage	2.85 V	
Max. Voltage <sup>1</sup>	3 V	
Capacitance Tolerance	0% / +20%	
Operating temperature range	-40 ~ 65 °C	
Storage temperature range	-40 ~ 70 °C	
Endurance Life (65°C)	1,500 Hours	
	Capacitance change	Within 20% of initially specified value
	ESR change	Within 100% of initially specified value
Projected Life Time (25°C)	10 Years at rated voltage	
	Capacitance change	Within 20% of initially specified value
	ESR change	Within 100% of initially specified value
Projected Cycle Life (25°C) <sup>2</sup>	1,000,000 Cycles	
	Capacitance change	Within 20% of initially specified value
	ESR change	Within 100% of initially specified value
Shelf Life (25°C)	4 Years stored uncharged state	
Certifications	ROHS, REACH, UL810A (Certificate No. : MH46367)	
Shock & Vibration	IEC 61373, IEC 60068	

## ■ Standard Ratings

Part number	Capacitance (F)	Max. ESR (mΩ)	Max. Current(A) Non-repeated (Calculated value)	Leakage Current (mA)	Max. Stored Energy (Wh)	Max. Continuous Current(A) <sup>3</sup>		Thermal Resistance (°C/W) _ Cell Surface
						ΔT=15 °C	ΔT=40 °C	
LSUC 02R85C 3000F EA	3000	0.23	2,530	< 5	3.38	150	245	2.90
LSUC 02R85C 2000F EA	2000	0.27	1,851	< 4	2.25	126	206	3.50
LSUC 02R85C 1500F EA	1500	0.28	1,505	< 3	1.69	115	188	4.05
LSUC 02R85C 1200F EA	1200	0.33	1,225	< 2.7	1.35	98	159	4.73
LSUC 02R85C 0650F EA	650	0.57	676	< 1.5	0.73	67	110	5.86

\*Remark

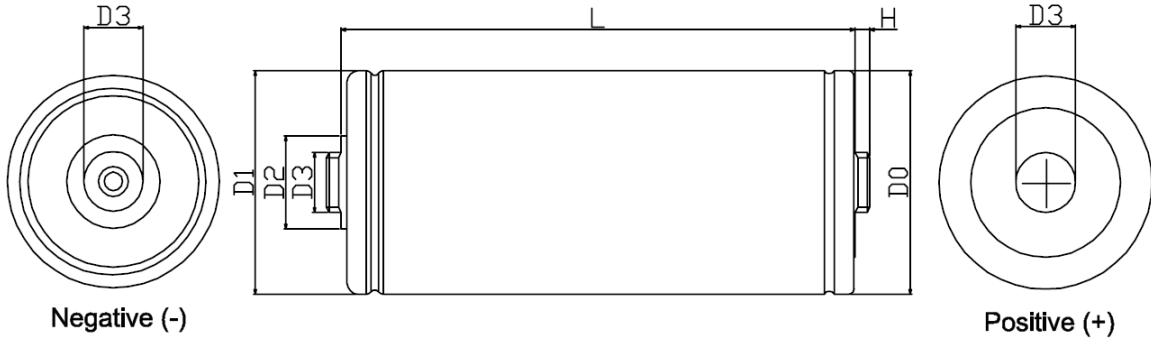
1) Non-repeated, not to exceed 1sec.

2) Actual cycle value can be subject to various application conditions.

3) Initial state value.

# Product Specification

## Physical Properties



## Standard Ratings

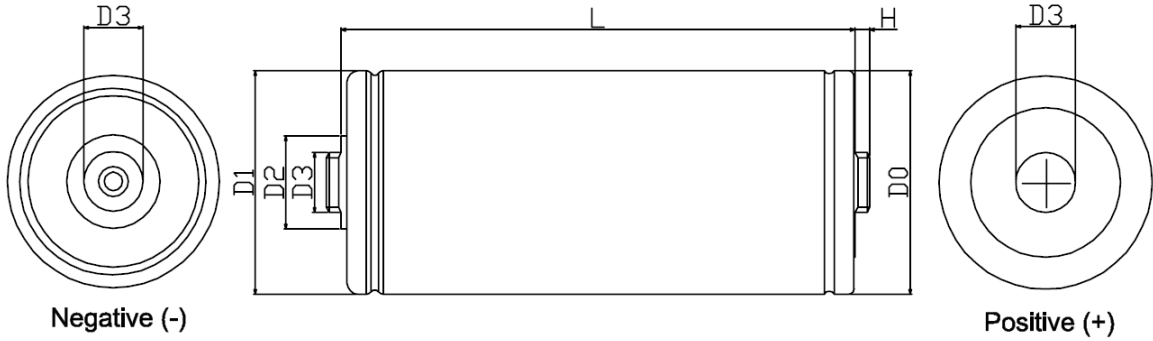
Part number (Short Threaded Terminal)	Dimension (mm)						Weight (g)
	D0 (+ 0.6)	D1 ( $\pm 0.7$ )	D2 ( $\pm 0.1$ )	D3	H ( $\pm 0.1$ )	L ( $\pm 0.5$ )	
LSUC 02R85C 3000F EA ST01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P1.0	4	138	515
LSUC 02R85C 2000F EA ST01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P1.0	4	102	380
LSUC 02R85C 1500F EA ST01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P1.0	4	85	320
LSUC 02R85C 1200F EA ST01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P1.0	4	74	280
LSUC 02R85C 0650F EA ST01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P1.0	4	51.5	200

Part number (Weldable Terminal)	Dimension (mm)						Weight (g)
	D0 (+ 0.6)	D1 ( $\pm 0.7$ )	D2 ( $\pm 0.1$ )	D3 ( $\pm 0.05$ )	H ( $\pm 0.125$ )	L ( $\pm 0.5$ )	
LSUC 02R85C 3000F EA WT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	$\varnothing 14$	3.18	138	515
LSUC 02R85C 2000F EA WT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	$\varnothing 14$	3.18	102	380
LSUC 02R85C 1500F EA WT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	$\varnothing 14$	3.18	85	320
LSUC 02R85C 1200F EA WT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	$\varnothing 14$	3.18	74	280
LSUC 02R85C 0650F EA WT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	$\varnothing 14$	3.18	51.5	200

\* Material for weldable terminal : AL 6061

# Product Specification

## Physical Properties



Negative (-)

Positive (+)

## Standard Ratings

Part number (Long Threaded Terminal)	Dimension (mm)						Weight (g)
	D0 (+ 0.6)	D1 ( $\pm 0.7$ )	D2 ( $\pm 0.1$ )	D3	H ( $\pm 0.1$ )	L ( $\pm 0.5$ )	
LSUC 02R85C 3000F EA LT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P2.0	14	138	520
LSUC 02R85C 2000F EA LT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P2.0	14	102	385
LSUC 02R85C 1500F EA LT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P2.0	14	85	325
LSUC 02R85C 1200F EA LT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P2.0	14	74	285
LSUC 02R85C 0650F EA LT01	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M16, P2.0	14	51.5	205

Part number (Long Threaded Terminal)	Dimension (mm)						Weight (g)
	D0 (+ 0.6)	D1 ( $\pm 0.7$ )	D2 ( $\pm 0.1$ )	D3	H ( $\pm 0.1$ )	L ( $\pm 0.5$ )	
LSUC 02R85C 3000F EA LT02	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M12, P1.75	14	138	520
LSUC 02R85C 2000F EA LT02	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M12, P1.75	14	102	385
LSUC 02R85C 1500F EA LT02	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M12, P1.75	14	85	325
LSUC 02R85C 1200F EA LT02	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M12, P1.75	14	74	285
LSUC 02R85C 0650F EA LT02	$\varnothing 60$	$\varnothing 60.7$	$\varnothing 25$	M12, P1.75	14	51.5	205