



LS Ultracapacitor Small Cell Line-up

LS Materials continues to expand its ultracapacitor portfolio to meet the diverse needs of our customers.

In addition to our proven mid and large cell solutions for high-energy and industrial applications, we have recently launched a new small cell line-up.

This new range is ideal for applications such as industrial automation, smart meters and IoT devices, power tools, automotive electronics, telecommunications equipment, medical devices, and small-scale renewable energy systems.

These compact cells are engineered for high power density and rapid charge/discharge cycles, delivering reliable performance across a wide operating temperature range.

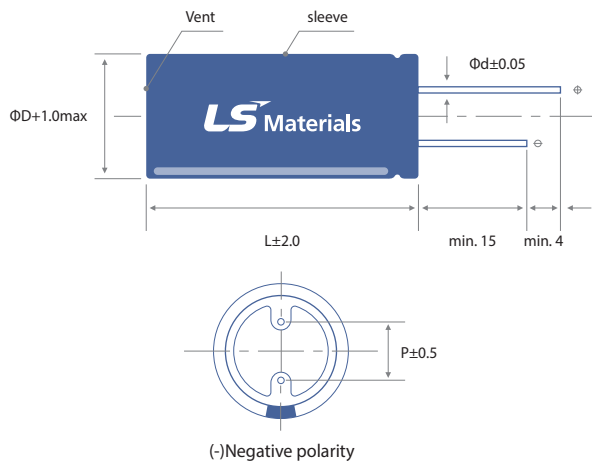
Their smaller form factor enables easy integration into space-constrained systems.

LS Ultracapacitor Small Cell Line-up

PERFORMANCE & ENVIRONMENTAL SPECIFICATIONS

Type	Rating
Surge Voltage	3.15V
Capacitance Tolerance	0% ~ +30% / 0% ~ +50% (5F)
Operating Temperature	-40°C to +65°C

DIMENSIONS SPECIFICATIONS



LIFE INFORMATION

Type	Rating
Endurance Life (65°C)	1,000 hours
Capacitance Change ¹	<30%
ESR Change ²	<100%
Projected Life (25°C)	10 years
Capacitance Change ¹	<30%
ESR Change ²	<100%
Projected Cycle Life (25°C) ³	500,000 Cycles
Capacitance Change ¹	<30%
ESR Change ²	<100%
Damp Heat, Steady State (60±2°C, 90%RH)	1,000 hours
Capacitance Change ¹	<30%
ESR Change ²	<100%
Shelf Life (25°C)	4 years

¹ Decrease from minimum Capacitance value.

² Increase from maximum ESR value.

³ Cycle Life may vary for different working condition (e.g. voltage or temperature)

PRODUCT SPECIFICATIONS

Rated Voltage	Capacitance	Part Name	Internal Resistance ESR AC	Internal Resistance ESR DC	Maximum Continuous Current	Maximum Peak Current	72-hour Leakage Current	Maximum Energy	Energy Density	Power Density	Outer Diameter (ΦD)	Height (L)	Pin Spacing (P)	Pin Diameter (Φd)	Weight
V	F		mΩ (1kHz)	mΩ	A (ΔT=15°C)	A	μA	Wh	Wh/kg	Wh/kg	mm	mm	mm	mm	g
3	5	LSUC 003R0R 0005F EA	≤ 40	≤ 90	1.09	5.17	≤15	0.0063	2.84	5.45	10	20	5.0	0.6	2.2
	10	LSUC 003R0R 0010F EA	≤ 25	≤50	1.75	10.0	≤25	0.0125	3.91	6.75	10	30	5.0	0.6	3.2
	15	LSUC 003R0R 0015F EA	≤20	≤50	1.82	12.86	≤35	0.0188	4.36	5.02	12.5	25	5.0	0.6	4.3
	25	LSUC 003R0R 0025F EA	≤15	≤25	2.96	23.08	≤75	0.0313	4.17	5.16	16	25	7.7	0.8	7.5
	30	LSUC 003R0R 0030F EA	≤20	≤30	2.92	23.68	≤80	0.0375	4.46	4.29	16	30	7.7	0.8	8.4
	50	LSUC 003R0R 0050F EA	≤15	≤20	4.34	37.50	≤100	0.0625	4.70	4.06	18	40	7.7	0.8	13.3
	100	LSUC 003R0R 0100F EA	≤8	≤10	7.39	75.00	≤260	0.1250	5.95	5.14	18	60	7.7	0.8	21.0