



Document Number	V02_180828
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Product specification

LSUM 048R6C 0166F EA DC



Product specification

■ Specification

1. Primary specification

Part number	Capacitance (F)	Max. ESR (mΩ)_DC	Max. Current (A) ¹ Non-repeated (Calculated value)	Leakage Current (mA)
LSUM 048R6C 0166F EA DC	166	5	2,200	< 5 (For active), < 27 (For passive)

2. Power & Energy

Part number	Usable Specific Power, P _d (W/kg) ²	Impedance Match Specific Power, P _{max} (W/kg) ³	Energy Density (Wh/kg)	Max. Stored Energy (Wh)
LSUM 048R6C 0166F EA DC	4,000	8,400	3.9	54.5

3. Standard & Reliability

Rated Voltage	48.6V		
Max. Voltage ⁴	51.3V		
Maximum series Voltage	750V		
Capacitance Tolerance	0% / +20%		
Operating temperature range	-40 ~ 65 °C		
Storage temperature range	-40 ~ 70 °C		
Max. continuous current ⁵	ΔT = 15 °C	80A	
	ΔT = 40 °C	130A	
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) ⁶	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, UL810A		

4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Cell voltage monitoring	Balancing
LSUM 048R6C 0166F EA DC	NTC Thermistor	Analog	Deutsch DTM	Over Voltage Alarm	Active or Passive

*Remarks

1) The stated maximum peak current should not be used in normal operation and is only provided as a reference value.

2) Usable specific power

$$P_d = \frac{0.12 \times V^2}{ESR \times mass}$$

3) Impedance match specific power

$$P_{max} = \frac{V^2}{4 \times ESR \times mass}$$

4) Non repeated, not to exceed 1sec.

5) Initial state value.

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

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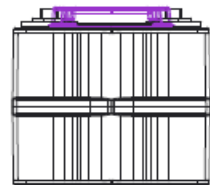
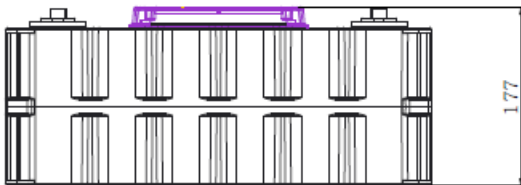
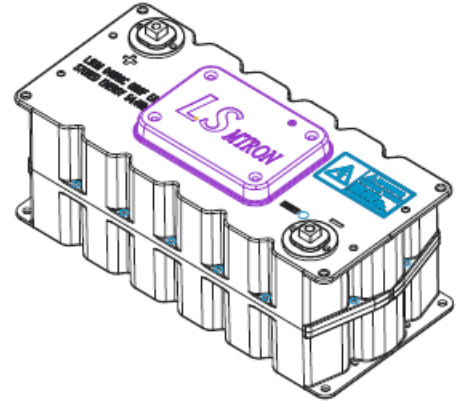
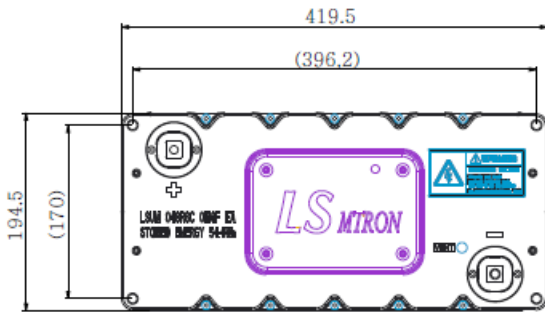
Safety & Physical Protection

Part number	Isolation voltage (DC)	Short circuit current(A) ⁷	Power Terminals	Recommended Torque - Terminal	Environmental Protection ⁸	Shock & vibration Protection ⁸
LSUM 048R6C 0166F EA DC	2.5kV	9,700	M8 / M10	20 / 30 Nm	IP 65	IEC61373

Dimension in mm (not to scale)

Geometric properties

Part number	Dimension (mm)			Max. Weight (kg)
	Length	Width	Height	
LSUM 048R6C 0166F EA DC	194.5±1.0	419.5±1.0	177±1.0	14.0



*Remarks

7) Calculated value. Do not use as an operating current.

8) This value is for a test with limited conditions and may be different under actual conditions.