

Document Number V02\_170117

# Product specification

LSUM 086R4C 0093F EA



## **Product specification**

#### **■** Specification

#### 1. Primary specification

Part number	Capacitance (F)	Max. ESR (mΩ)_DC	Max. Current (A)  Non-repeated (Calculated value)	Leakage Current (mA)	
LSUM 086R4C 0093F EA 93		11.3	1,900	< 120	

#### 2. Power & Energy

Part number  Usable Specific Power, P <sub>d</sub> (W/kg) <sup>1</sup>		Impedance Match Specific Power, P <sub>max</sub> (W/kg) <sup>2</sup>	Energy Density (Wh/kg)	Max. Stored Energy (Wh)	
LSUM 086R4C 0093F EA	2,900	6,100	3.6	96.4	

#### 3. Standard & Reliability

Rated Voltage	86.4V				
Max. Voltage <sup>3</sup>	91.2V				
Maximum series Voltage	750V				
Capacitance Tolerance	0% / +20%				
Operating temperature range		-40 ~ 65 °C			
Storage temperature range	-40 ~ 70 °C				
Max. continuous current <sup>4</sup>	ΔT = 15 °C	50A			
Max. continuous current	ΔT = 40 °C	80A			
	1,500 Hours				
Endurance Life (65℃)	Capacitance change	Within 20% of initially specified value			
	ESR change	Within 100% of initially specified value			
	10 Years at rated voltage				
Projected Life Time (25℃)	Capacitance change	Within 20% of initially specified value			
	ESR change	Within 100% of initially specified value			
	1,000,000 Cycles				
Projected Cycle Life (25℃) <sup>5</sup>	Capacitance change	Within 20% of initially specified value			
	ESR change	Within 100% of initially specified value			
Shelf Life (25℃)	4 Years stored uncharged state				

#### 4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Balancing	
LSUM 086R4C 0093F EA	PT100	Analog	Harting	Passive	

\*Remarks

1) Usable specific power

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

2) Impedance match specific power

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

3) Non repeated, not to exceed 1sec.

4) Initial state value.

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



# **Product specification**

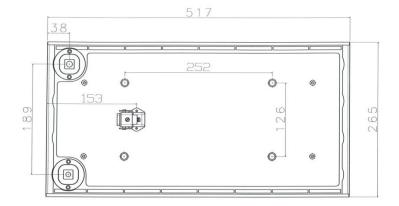
### ■ Safety & Physical Protection

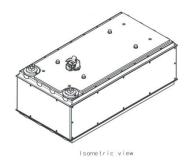
Part number	Isolation voltage (DC)	Short circuit current(A)	Power Terminals	Recommended Torque - Terminal	Environmental Protection <sup>6</sup>	Shock & vibration Protection
LSUM 086R4C 0093F EA	2.5kV	7,600	M8 / M10	20 / 30 Nm	IP 54	SAE J2380

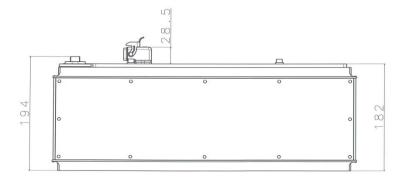
Dimension in mm (not to scale)

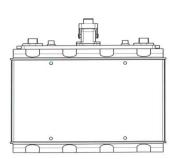
### **■** Geometric properties

Dort number		M . W : 1. (1 )		
Part number	Length	Wide	Height	Max. Weight (kg)
LSUM 086R4C 0093F EA	517.0±1.0	265.0±1.0	210.5±1.0	27









<sup>6)</sup> As a test result of sample, This test result does not guarantee the whole product quality.

