



Document Number	V02_170117
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# Product specification

LSUM 016R2C 0500F 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 016R2C 0500F EA	500	1.7	2,100	< 5

### 2. Power & Energy

Part number	Usable Specific Power, $P_d$ (W/kg) <sup>1</sup>	Impedance Match Specific Power, $P_{max}$ (W/kg) <sup>2</sup>	Energy Density (Wh/kg)	Max. Stored Energy (Wh)
LSUM 016R2C 0500F EA	3,300	6,800	3.3	18.2

### 3. Standard & Reliability

Rated Voltage	16.2 V		
Max. Voltage <sup>3</sup>	17.1V		
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>	$\Delta T = 15 \text{ }^\circ\text{C}$	122 A	
	$\Delta T = 40 \text{ }^\circ\text{C}$	200 A	
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>5</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		

### 4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Balancing
LSUM 016R2C 0500F EA	NTC Thermistor (Optional)	Analog	Deutsch DTM	Active or Passive

#### \*Remarks

1) Usable specific power

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

2) Impedance match specific power

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

3) Non repeated, not to exceed 1sec.

4) Initial state value.

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

# Product specification

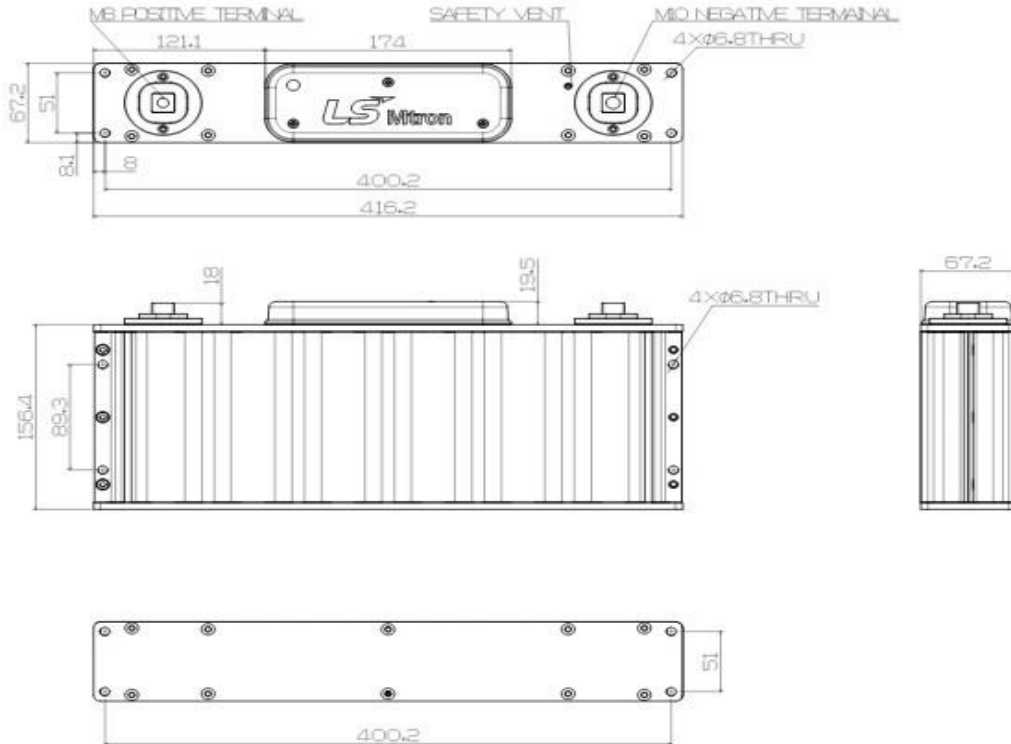
## ■ Safety & Physical Protection

Part number	Isolation voltage (DC)	Short circuit current(A)	Power Terminals	Recommended Torque - Terminal	Environmental Protection <sup>6)</sup>	Shock & vibration Protection
LSUM 016R2C 0500F EA	2.5kV	9,500	M8 / M10	20 / 30 Nm	IP 65	SAE J2464 / SAE J2380

Dimension in mm (not to scale)

## ■ Geometric properties

Part number	Dimension (mm)			Max. Weight (kg)
	Length	Width	Height	
LSUM 016R2C 0500F EA	67.2±1.0	416.2±1.0	175.9±1.0	5.6



\*Remarks

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