Document Number	V02_180828

Product specification

LSUM 016R2C 0500F EA

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 016R2C 0500F EA	500	1.7	2,100	< 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 016R2C 0500F EA	3,300	6,800	3.3	18.2

3. Standard & Reliability

Rated Voltage	16.2 V	
Max. Voltage[4]	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[5]	ΔT = 15 ℃	122 A
	ΔT = 40 ℃	200 A
Endurance Life (65℃)	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℃)	4 Years stored uncharged state	

4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Balancing
LSUM 016R2C 0500F EA	NTC Thermistor (Optional)	Analog	4 pin connector	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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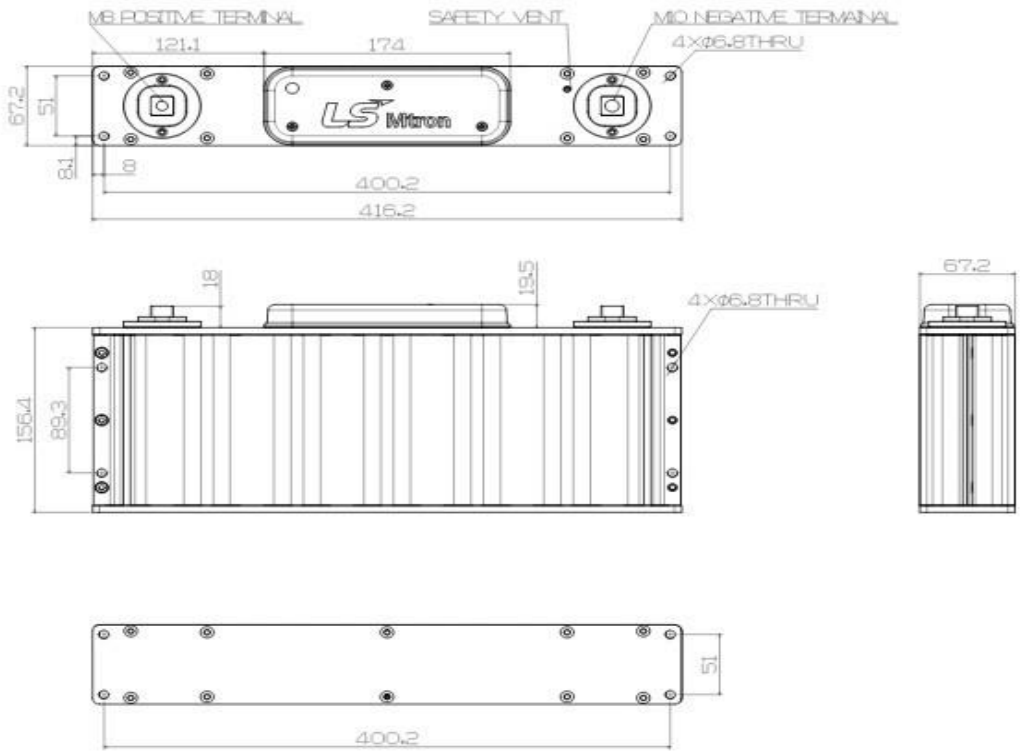
■ Safety & Physical Protection

Part number	Isolation voltage (DC)	Short circuit current(A)[7]	Power Terminals	Recommended Torque - Terminal	Environmental Protection[8]	Shock & Vibration Protection[8]
LSUM 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
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.