



Document Number	V02_170117
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# Product specification

LSUM 168R0L 0005F 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 168R0L 0005F EA	5.8	240	200	< 25

### 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 168R0L 0005F EA	2,100	4,500	3.5	22.7

### 3. Standard & Reliability

Rated Voltage	168 V		
Max. Voltage <sup>3</sup>	180 V		
Maximum series Voltage	750 V		
Capacitance Tolerance	0% / +20%		
Operating temperature range	-40 ~ 65 °C		
Storage temperature range	-40 ~ 70 °C		
Max. continuous current <sup>4</sup>	$\Delta T = 15$ °C	7A	
	$\Delta T = 40$ °C	12A	
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>	500,000 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	REACH, UL810A		

### 4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Cell voltage monitoring	Balancing
LSUM 168R0L 0005F EA	NTC Thermistor	Analog	M5 Terminal type	Half Voltage Monitoring	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

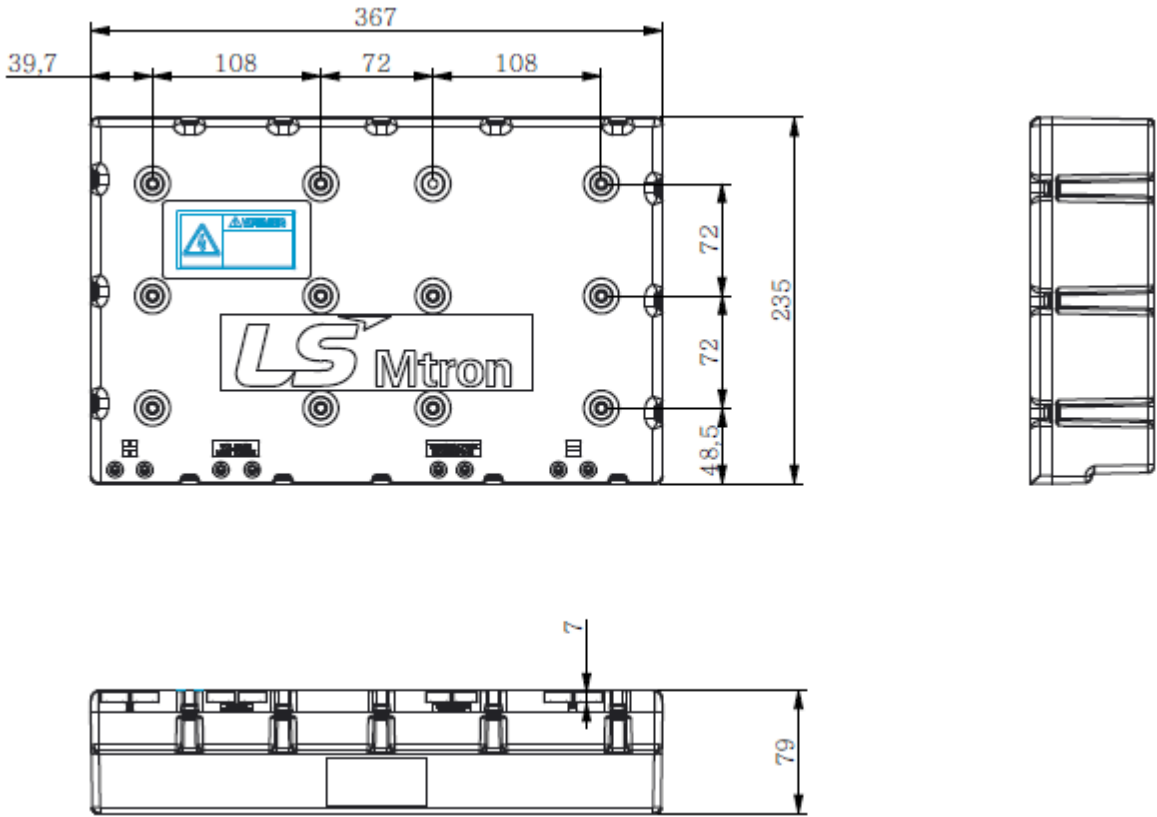
## Safety & Physical Protection

Part number	Isolation voltage (DC)	Short circuit current(A)	Power Terminals	Recommended Torque - Terminal	Environmental Protection <sup>6)</sup>	Shock & vibration Protection
LSUM 168R0L 0005F EA	5.6kV	700	M5	4 Nm	IP 54	IEC60068-2-27 IEC60068-2-6

Dimension in mm (not to scale)

## Geometric properties

Part number	Dimension (mm)			Max. Weight (kg)
	Length	Width	Height	
LSUM 168R0L 0005F EA	235±1	367±1	79±1	6.5



\*Remarks

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