Document Number	V02_170117

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)[1]	Impedance Match Specific Power, P_{max} (W/kg)[2]	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[3]	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[4]	ΔT = 15 ℃	7A
	ΔT = 40 ℃	12A
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℃)	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℃)[5]	500,000 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	
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

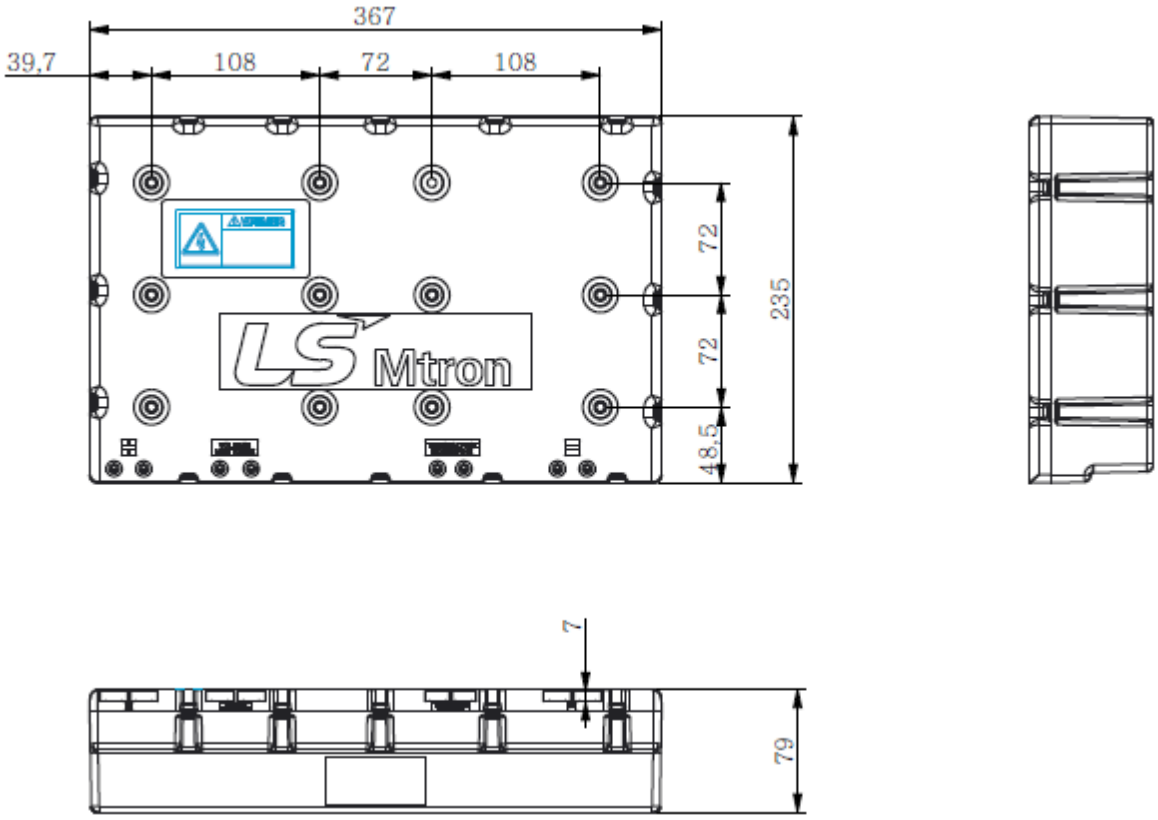
■ Safety & Physical Protection

Part number	Isolation voltage (DC)	Short circuit current(A)	Power Terminals	Recommended Torque - Terminal	Environmental Protection[6]	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.