Document Number	V02_170117

Product specification

LSUM 048R6C 0166F EA YJ

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 048R6C 0166F EA YJ	166	5	2,200	< 5 (For active), <27 (For passive)

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 048R6C 0166F EA YJ	3,200	6,800	3.2	54.5

3. Standard & Reliability

Rated Voltage	48.6V	
Max. Voltage[3]	51.3V	
Maximum series Voltage	750V	
Capacitance Tolerance	0% / +20%	
Operating temperature range	-40 ~ 65 ˚C	
Storage temperature range	-40 ~ 70 ˚C	
Max. continuous current[4]	ΔT = 15 ℃	130A
	ΔT = 40 ℃	200A
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]	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	
Certifications	ROHS, REACH	

4. Monitoring

Part number	Temperature sensor	Temperature interface	Connector	Cell voltage monitoring	Balancing
LSUM 048R6C 0166F EA YJ	NTC Thermistor	Analog	4 pin connector	Over Voltage Alarm (Optional)	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.

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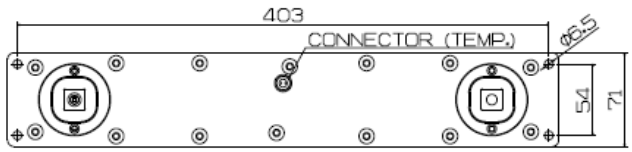
■ Safety & Physical Protection

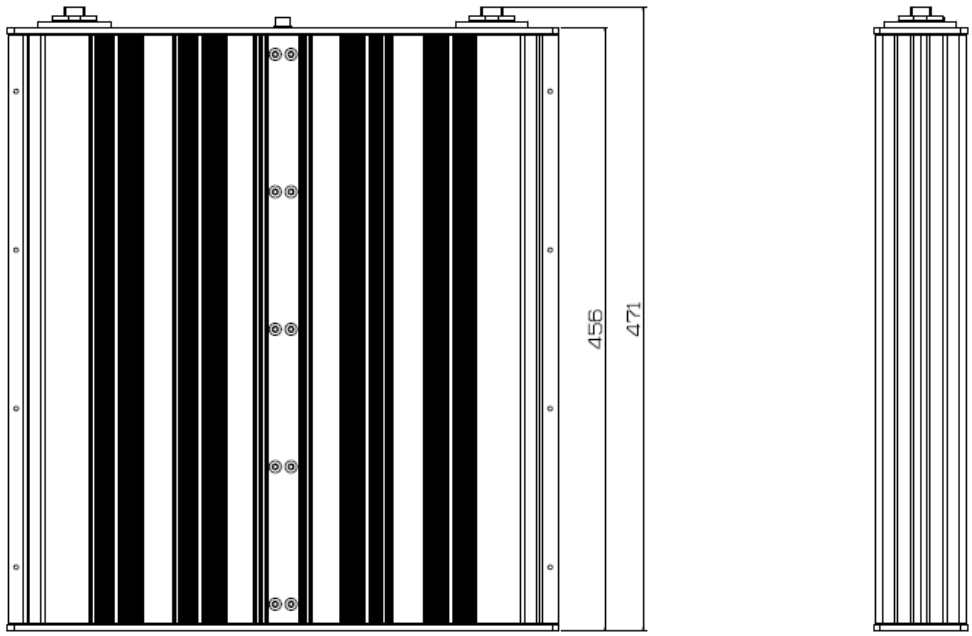
Part number	Isolation voltage (DC)	Short circuit current(A)	Power Terminals	Recommended Torque - Terminal	Environmental Protection[6]	Shock & vibration Protection
LSUM 048R6C 0166F EA YJ	2.5kV	9,700	M8 / M10	20 / 30 Nm	IP 66	IEC61373

Dimension in mm (not to scale)

■ Geometric properties

Part number	Dimension (mm)			Max. Weight (kg)
	Length	Width	Height	
LSUM 048R6C 0166F EA YJ	471±2	418±1	71±1	17.2





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