



Document Number V02_180828

Product specification

LSUM 048R6C 0166F EA YJ



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 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) ²	Impedance Match Specific Power, P _{max} (W/kg) ³	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 ⁴	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 ⁵	ΔT = 15 °C	130A		
	ΔT = 40 °C	200A		
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) ⁶	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			
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) 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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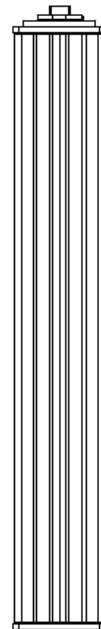
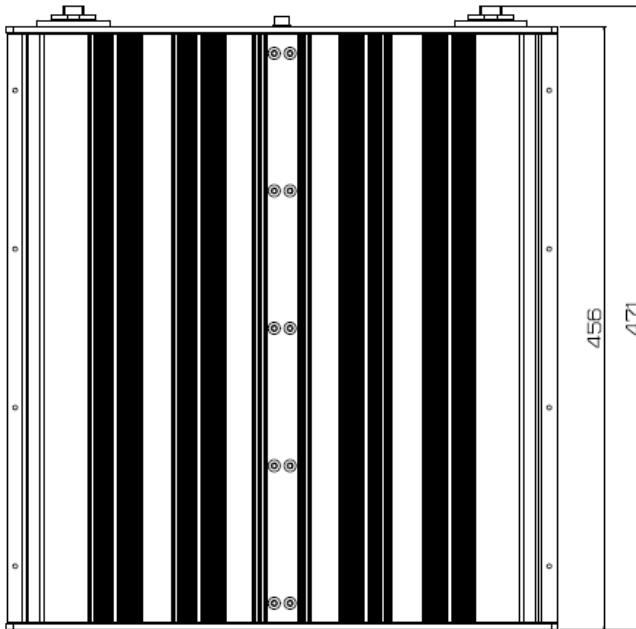
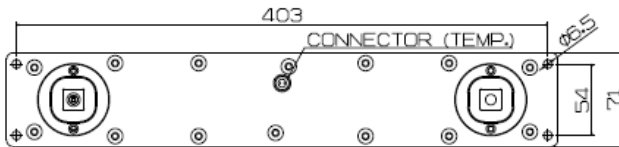
Safety & Physical Protection

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

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.