



Document Number	V02_170117
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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 °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) ⁵	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) 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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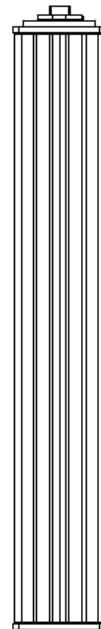
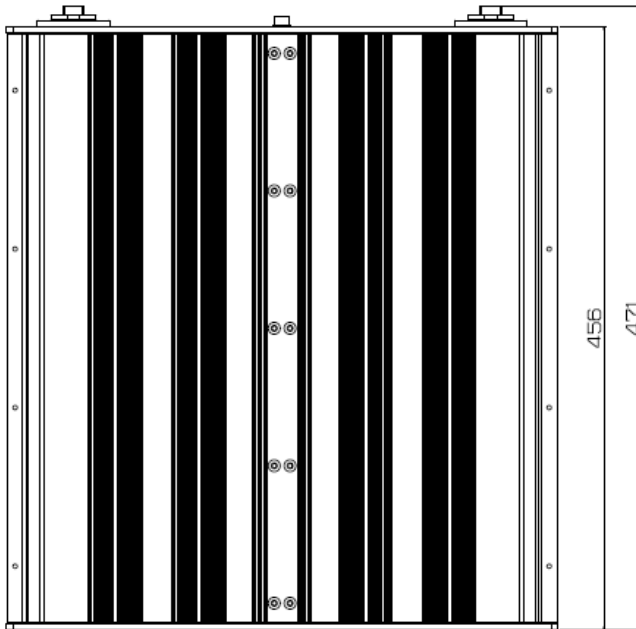
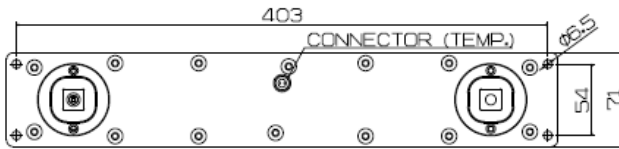
Safety & Physical Protection

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.