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Product specification

LSUM 0380R8L 0002F 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 0380R8L 0002F EA | 2.5 | 650 | 180 | < 12 |

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 0380R8L 0002F EA | 1,400 | 3,000 | 2.7 | 50.4 |

3. Standard & Reliability

| | | | |
|---|--------------------------------|--|--|
| Rated Voltage | 380.8V | | |
| Max. Voltage ³ | 408V | | |
| Maximum Series Voltage | 408V | | |
| Capacitance Tolerance | 0% / +20% | | |
| Operating temperature range | -40 ~ 65 °C | | |
| Storage temperature range | -40 ~ 70 °C | | |
| Max. continuous current ⁴ | $\Delta T = 15$ °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) ⁵ | 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 | | |

4. Monitoring

| Part number | Temperature sensor | Temperature & Voltage interface | Connector | Cell voltage monitoring | Balancing |
|-----------------------|--------------------|---------------------------------|-------------|-------------------------|-----------|
| LSUM 0380R8L 0002F EA | PTC | Alarm | AMP178803-3 | Over voltage alarm | 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 | Shock & vibration Protection |
|-----------------------|------------------------|--------------------------|-----------------|-------------------------------|------------------------------|
| LSUM 0380R8L 0002F EA | 2.5KV | 580 | M6 | 6 Nm | IEC 60068-2-6 |

Dimension in mm (not to scale)

Geometric properties

| Part number | Dimension (mm) | | | Weight (kg) |
|-----------------------|----------------|-------|--------|-------------|
| | Length | Width | Height | |
| LSUM 0380R8L 0002F EA | 750±2 | 191±1 | 163±1 | 18.4±0.5 |

