# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Effective June 2018 Supersedes February 2018

## XLM-62R1137A-R Supercapacitors 62 V Module



## Description

Eaton supercapacitors are high reliability, high power, ultra-high capacitance energy storage devices utilizing electrochemical double layer capacitor (EDLC) construction combined with proprietary materials and processes. This combination of advanced technologies allows Eaton to offer a wide variety of capacitor solutions tailored to applications for backup power, pulse power and hybrid power systems. They can be applied as the sole energy storage or in combination with batteries to optimize cost, life time and run time. System requirements can range from a few microwatts to megawatts. All products feature low ESR for high power density with environmentally friendly materials for a green power solution. Eaton supercapacitors are maintenance-free with design lifetimes up to 20 years and operating temperatures down to -40 °C and up to +85 °C.

## Features

- Up to 20-year operating life
- Low ESR for high power density
- Long cycle life
- RoHS compliant
- · Passive balancing to maximize lifetime
- Typical efficiency >98%
- Maintenance free
- · Easy rack mounting

### Applications

- Datacenter UPS
- Bridge power
- Hospital UPS
- Hybrid power system with fuel cells
- · Grid storage
- Semiconductor equipment (SEMI F47 compliant)



## Ratings

| Capacitance                 | 130 F               |
|-----------------------------|---------------------|
| Maximum working voltage     | 62.1 V              |
| Capacitance tolerance       | 0% to +20% (+20 °C) |
| Operating temperature range | -40 °C to +65 °C    |

## Specifications

| Capacitance (F) | Part Number    | Initial<br>Maximum<br>DC ESR <sup>1</sup><br>(mΩ) | Standby current¹<br>(mA) @ +20 °C 72 Hour | Maximum<br>current⁵ (A) | Peak power <sup>2</sup><br>(kW) | Total stored<br>energy <sup>3</sup><br>(Wh) | Usable power⁴<br>(kW) |
|-----------------|----------------|---|---|-------------------------|---------------------------------|---|-----------------------|
| 130             | XLM-62R1137A-R | 6.7   | 128                                       | 2000                    | 140                             | 69.6  | 69.1                  |

1. Measured according to IEC 62391 @ 62.1 V

2. Power = Vrated<sup>2</sup>/4/DC ESR 3. Energy =  $\frac{1}{2}C^*Vrated^2/3600$ 

4. Usable power = 0.12\*Vrated<sup>2</sup>/DC ESR

5. Maximum current, 1 second discharge = 1/2C\*V/(1 + DC ESR\*C)

## Performance

| Parameter (F)                           | Capacitance change<br>(% of initial value) | ESR (% of maximum<br>initial value) |
|---|--|-------------------------------------|
| Life (1500 hours @ +65 °C/62.1 Vdc)     | ≤ 20%                                      | ≤ 200%                              |
| Life (10 years @ +25 °C/62.1 Vdc)       | ≤ 20%                                      | ≤ 200%                              |
| Cycling (1M cycles +25 °C) <sup>1</sup> | ≤ 20%                                      | ≤ 200%                              |
| Storage – 3 years (uncharged, +30 °C)   | ≤ <b>3%</b>                                | ≤ 10%                               |

1. Cycle: Vrated to ½ Vrated, 100 A

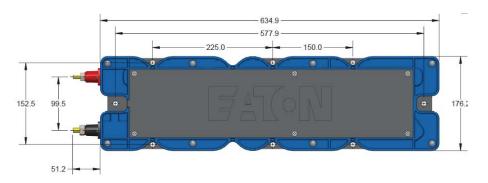
## **Standards and certifications**

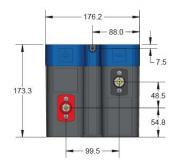
| Agency information      | UL810A file number: MH46887 |
|-------------------------|-----------------------------|
| Shock and vibration     | Telcordia GR-63 Zone 4      |
| Environmental           | IP30, RoHS,                 |
| Altitude, Operating     | 10,000 ft / 3,000 meters    |
| Altitude, Non-operating | 40,000 ft / 12,000 meters   |

## XLM-62R1137A-R Supercapacitors 62 V Module

## Dimensions (mm) and Mass (kg)

| Part Number    | w   | L     | н   | Typical Mass (kg) |
|----------------|-----|-------|-----|-------------------|
| XLM-62R1137A-R | 176 | 635   | 173 | 16                |
| Tolerance      |     | ± 1.0 |     |                   |
|                |     |       |     |                   |





Positive Terminal: 5/16" – 18 threaded stud Negative Terminal: 3/8" – 16 threaded stud

## Part numbering system

| XLM               | – 62R1                    | 13   | 7          | Α                 | -R               |  |
|-------------------|---------------------------|--|------------|-------------------|------------------|--|
| Family Code       | Voltage (V)<br>R= decimal | Capacitance (µF)                             |            |                   |                  |  |
|                   |                           | Value  | Multiplier | Passive balancing |                  |  |
| XLM = Family code | 62R1= 62.1 V              | Example 130=13 x 10 <sup>7</sup> µF or 130 F |            |                   | Standard product |  |

### **Packaging information**

• Standard packaging: 1piece per box

### Part marking

- Capacitance (F)
- Nominal working voltage (V)
- Family code (lot number & serial #)
- Polarity marking

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

#### Eaton

Electronics Division 1000 Eaton Boulevard Cleveland, OH 44122 United States www.eaton.com/electronics

FATON Powering Business Worldwide © 2018 Eaton All Rights Reserved Printed in USA Publication No. 10754 PCN-18008 June 2018

Eaton is a registered trademark.

All other trademarks are property of their respective owners.