

ESS MODULE SSC108V94F1.0 DATASHEET

Surge Supercapacitors are proud to leverage our innovative technology, bringing cutting-edge energy storage solutions. The **SSCMOD108V94F1.0** ultracapacitor module is engineered with 36 high-performance 3V, 3400F cells in series, delivering 108V and 94F capacitance. Designed for demanding applications, it offers exceptional energy storage, low ESR, and reliable operation in high-power environments.

- ✦ Advanced Supercapacitor Management System with active Balancing
- ✦ CAN bus communication
- ✦ High Power with ultra-low ESR
- ✦ Long lifetime - 1 million duty cycles
- ✦ Wide operating temp. range
- ✦ Power connector through Ø 13.5 mm
- ✦ Inbuilt Display - Optional

SPECIFICATIONS

Description	SSCMOD108V94F1.0	Unit
Rated Voltage	108	V
Surge Voltage	111.6	V
Capacitance Tolerance	-10% ~ +20%	
ESR (DC) 1s	≤ 8	mΩ
Leakage current (At 108 V, 25 °C and 72 hours)	9.21	mA
Energy stored	152.28	Wh
Max. Power	364.5	KW
Max Current	2897	A
IP rating	IP 20	mm
Dimension	L-629, B-380, H-187	mm
Weight	38	kg
Communication	CAN bus	
Configuration	36S1P	
Certifications*	IEC, RoHS, JSS55555	
Positive and Negative terminal to housing DC 1KV	2100	MΩ

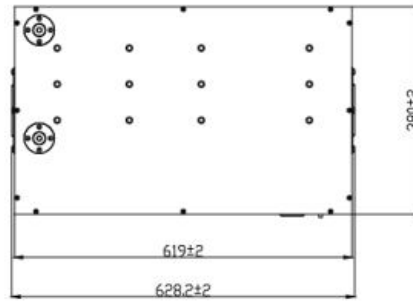
$$I_{Max} = \frac{\frac{1}{2} CV}{C \times 1s ESR + 1}$$

$$E_{Stored} = \frac{\frac{1}{2} CV^2}{3600}$$

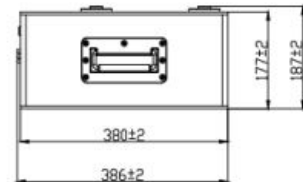
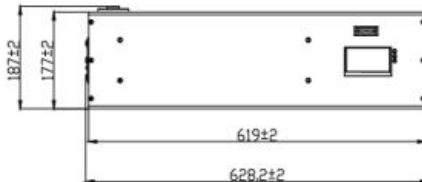
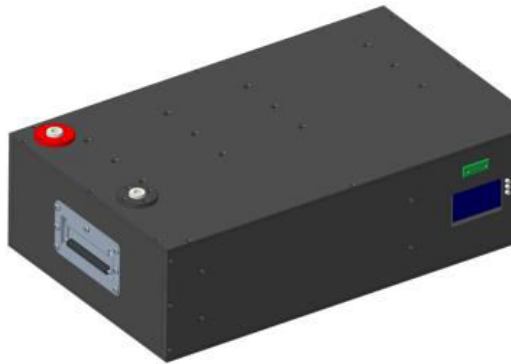
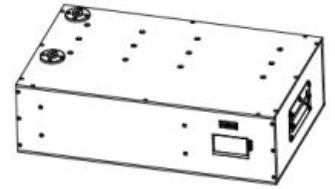
$$P_{Max} = \frac{V^2}{4 \times ESR}$$

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*Certification process ongoing.



Unit: mm



Applications:

Automotive- Energy recuperation and power boost systems.

Military- High-power pulse applications.

Industrial- Backup power and peak load handling.

Customization Options:

Tailored capacitance and configurations available to meet specific customer requirements. Our expert team provides complete technical guidance and support for seamless integration into your systems.

Contact Us:

For detailed specifications, pricing, and inquiries, please visit us at our website at www.surgesupercap.com.

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Notes:

These current values represent the beginning-of-life conditions of the product; for system design, an ESR margin of 200% should be considered.

All information provided in this datasheet and all subsequent sales and testing of supercapacitors are subject to our Standard Terms of Service (ToS). For details, please refer to the document *General Terms of Sale* available at www.surgesupercap.com.