

SUPERCAPACITOR DATASHEET

Surge Supercapacitors are proud to leverage our innovative technology, bringing cutting-edge energy storage solutions. The 3V, 1200 F to 3400F supercapacitor from Surge Supercap offers high energy storage and fast discharge, ideal for high-power applications such as automotive, military, and industrial systems. Its long lifecycle, combined with its environmentally-friendly design, makes it a top choice for sustainable energy storage solutions.

- ✦ Durable and safe aluminum casings
- ✦ Weldable terminals
- ✦ High Power cell with ultra-low ESR
- ✦ More than 1 million cycles
- ✦ High temperature tolerance

SPECIFICATIONS

Description	1200 F	1800 F	2400 F	3000 F	3400 F	Unit
Rated Voltage			3			V
Surge Voltage			3.1			V
Capacitance Tolerance			-10% ~ +20%			
ESR (DC) 1s	0.32	0.30	0.25	0.22	0.20	mΩ
Leakage current (At 3 V, 25 °C and 72 hours)	4.5	6.3	8.7	10.8	11.0	mA
Energy stored	1.5	2.25	3.0	3.75	4.5	Wh
Max. Power	7.03	7.5	9	10.2	11.25	KW
Max Current	1300	1753	2250	2571	3035	A
Height	72	94	122	144	144	mm
OD			60			mm
Weight	260	350	430	510	540	g
Certifications*	IEC, RoHS, JSS55555					
Operating temperature range	-40 °C - +65 °C					
Short circuit current			3			KA

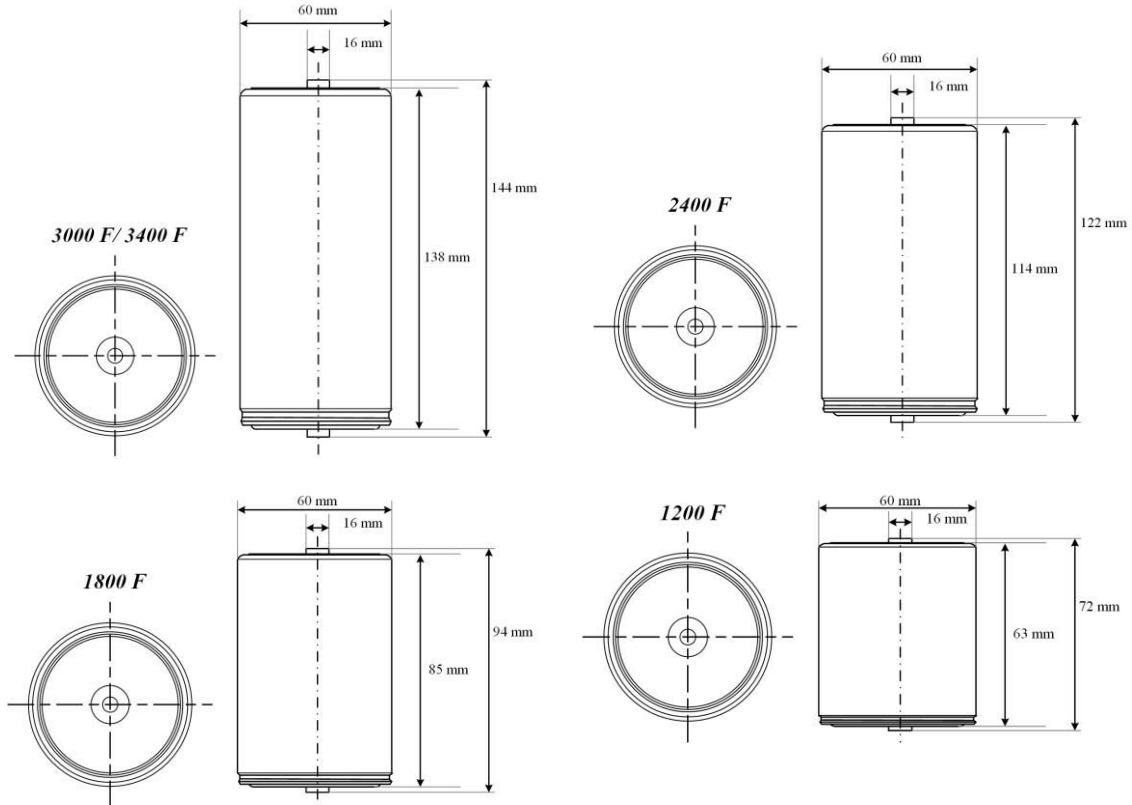
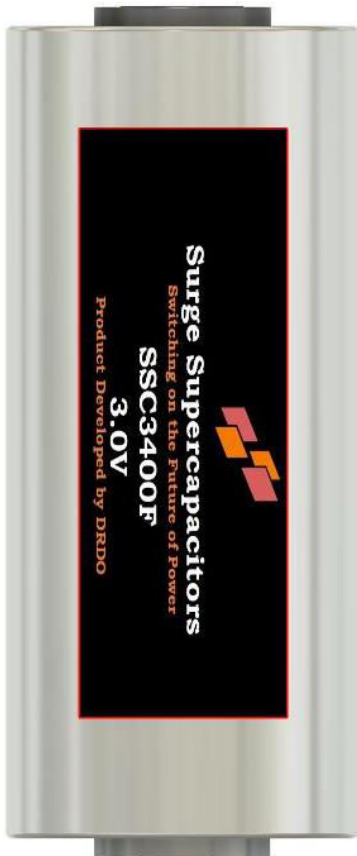
$$I_{Max} = \frac{\frac{1}{2} CV}{C \times 1s ESR + 1}$$

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

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

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* *Certification process ongoing.



Applications:

Automotive- Boost systems, start-stop technology, and hybrid solutions.

Military- High-power pulse systems and rugged energy storage.

Industrial- Backup power, regenerative braking, and high-cycle operations.

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