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# **SPECIFICATIONS**

NESSCAP Ultracapacitor Products

ESHSR-0100C0-002R7

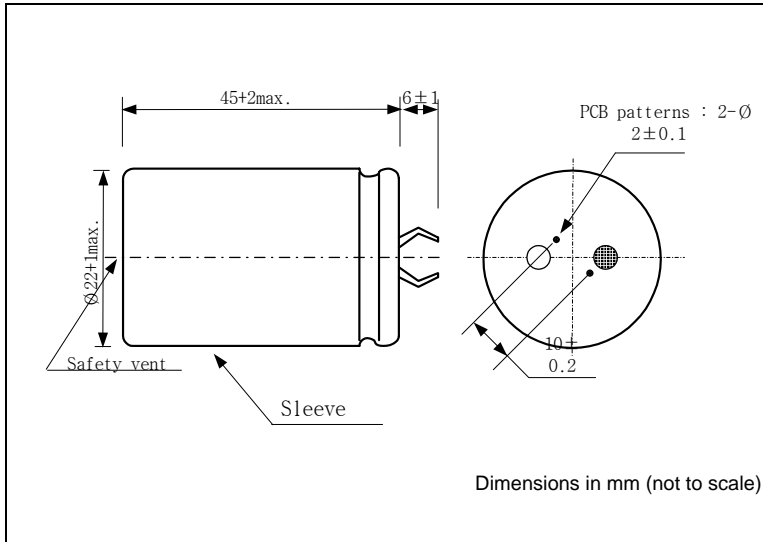
Version January 2013

# NESSCAP 100F/2.7V

ESHSR-0100C0-002R7

## ■ Features

- Cylindrical cell
- Snap-in terminals



## ■ Specifications

Rated Capacitance, C (DCC <sup>(1)</sup> , 25°C)	100 Farads	(1) Discharging with constant current	
Capacitance Tolerance	-10% / +20%		
Rated Voltage, V <sub>R</sub>	2.7 V		
Surge Voltage	2.85 V		
Rated Current (25°C) <sup>(2)</sup>	21.4 A	(2) 5 sec discharge rate to 1/2 V <sub>R</sub>	
Max. Current (25°C) <sup>(3)</sup>	> 58.7 A	(3) 1 sec discharge rate to 1/2 V <sub>R</sub>	
Max. Stored Energy (at V <sub>R</sub> )	364.5J (0.1013 Wh)		
Specific Energy	Gravimetric	4.50 Wh/kg	
	Volumetric	5.92 Wh/l	
Specific Power <sup>(4)</sup> (at matched load)	Gravimetric	6.23 kW/kg	(4) Power density at which one-half the energy of the discharge is in the form of electricity and one-half is in heat.
	Volumetric	8.20 kW/l	
Maximum Internal Resistance (ESR)	AC (1kHz)	10 mΩ	
	DC (11A)	13 mΩ	
Dimensions	φ 22 x 45 mm		
Volume	17.1 ml		
Weight	22.5 g		
Operating temperature range <sup>(5)</sup>	-40 ~ 60 °C	(5)  ΔC  < 20% and ESR < 2 times of initially measured value at 25°C, respectively	
Storage temperature range	-40 ~ 70 °C		
Max. Leakage Current, L <sub>C</sub> ( 12h, 25°C)	1.7 mA		
Life Time at RT <sup>(6)</sup>	10 years	(6)  ΔC  < 30% and ESR < 2 times of initially measured value, respectively and LC < specified value	
Cycle Life (25°C) <sup>(6), (7)</sup>	500,000 cycles	(7) 1 cycle: charging to V <sub>R</sub> for 20s, constant voltage charging for 10s, discharging to 1/2V <sub>R</sub> for 20s, rest for 10s	