RC Dynamics 1S Super Low ESR Power Capacitor



Installation and Operating Instructions

Overview

The primary purpose of the ESC power capacitor is to minimise power losses caused by the high frequency switching currents generated during motor commutation/control. The goal being to maximise ESC performance and minimise the heat generated in the internal circuits. It is very important that the ESC has a power source with minimal source impedance.

The latest LiPo batteries used in 1S on road racing now already provide an incredibly low internal resistance. Therefore in order for the capacitor to provide maximum benefit it must have an ESR (Effective Series Resistance) at the relevant frequencies, at least an order of magnitude less than the LiPo battery internal resistance. The traditional Aluminium Electrolytic power caps do not have such a low ESR.

The RC Dynamics 1S Super Low ESR Power capacitor, is manufactured using the highest performance components available and is tailored to suit RC models powered by a 1S Lipo Voltage source. Prototypes have been highly successful, installed in the winning cars at the 2020 Stock World and European Championships, also at UK National level.



Installation

- Find a convenient point to mount the capacitor, keeping the input wires as short as possible
- Connect the input wires to the +ve and –ve of the 1S 3.7V LiPo, soldering the wires directly to the ESC posts or terminals. The capacitor is not sensitive to polarity of the connection
- Do not attempt to bend the wires in the area with protective heatshrink close to the capacitor, this could result in permanent damage
- Never connect the 1S Capacitor to a 2S LiPo, or any voltage higher than 6.0V, this will cause permanent damage

Ordering Information

Variant	Specifications	Ordering Information
_	Maximum voltage: 1S LiPo	Schumacher Racing
Capacitor – Large	Capacitance: 800uF Weight: 7grams	Products Ltd
	Dimensions:27mmx8mmx7.5mm	Part Number: RCD001
	Input Wires: Flexible Silicone 18awg	RRP: £49.99

If you have any questions please contact us. The capacitor works great with all ESC types mark@rcdynamics.co.uk +447932794617

For sales contact Schumacher Racing Products Ltd https://www.racing-cars.com/