

Double-Layer Capacitors with very High Capacitances in the Farad Range

Special Features

- Storage capacitors with very high capacitance values from 100 F to 400 F and a rated voltage of 2.5 VDC
- Discharge current up to 80 A
- Maintenance-free
- Series connection possible
- According to RoHS 2002/95/EC

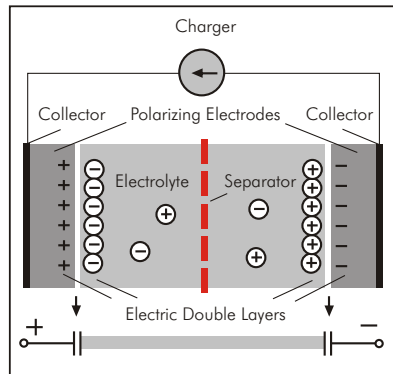
Typical Applications

Suitable for support, protection or replacement of batteries in the field of new traction technologies in

- Automotive
- Railway technology
- Wind power systems
- Uninterruptible power systems (UPS)

Construction

Internal construction:



Encapsulation:

Rectangular aluminium case, sealed by laser welding

Terminations:

FS 6.3 slip-on terminations according to DIN 46244

Marking:

Colour: Red. Marking: Black

Technical Data

Rated capacitance:	C _R	100 F	200 F	300 F	400 F
Capacitance tolerance:	-	±20%	±20%	±20%	±20%
Rated voltage:	U _R	2.5 V	2.5 V	2.5 V	2.5 V
Rated current:	I _C	30 A	45 A	50 A	80 A
Pulse current:	I _P	up to 200 A	up to 300 A	up to 400 A	up to 600 A
Internal resistance:	R _{DC}	12 mΩ	7 mΩ	6 mΩ	4 mΩ
Max. stored energy: ±20%	E _{max.}	313 J	625 J	938 J	1250 J
Operating temperature:	T _{op}	-30° C ... +65° C			
Storage temperature:	T _{st}	-40° C ... +70° C			
Weight:	m	40 g	62 g	90 g	95 g
Volume:	v	0.028 l	0.047 l	0.075 l	0.075 l

Additional Data

Case:	-	Al99.5	Al99.5	Al99.5	Al99.5
Lug terminal:	-	Brass	Brass	Brass	Brass

Comparative Data

Density of capacitance:					
gravimetric	C _d	2500 F/kg	3200 F/kg	3400 F/kg	4300 F/kg
volumetric	C _v	3600 F/l	4600 F/l	4400 F/l	5900 F/l
Energy density:					
gravimetric	E _d	2.2 Wh/kg	2.8 Wh/kg	3.0 Wh/kg	3.8 Wh/kg
volumetric	E _v	3.2 Wh/l	3.7 Wh/l	4.0 Wh/l	5.4 Wh/l

