

SUPER CAPACITORS

STANDARD TYPE

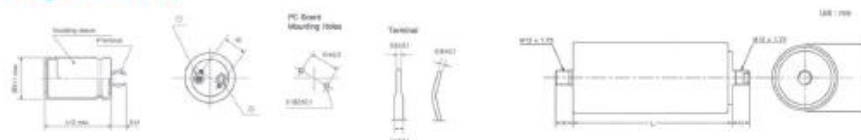
EDLC, also known as super-capacitor is symmetric electrochemical capacitors in which energy storage is achieved by means of the physical adsorption of ions to the large specific surface area of activated carbon. EDLC consists of active carbon and an organic solvent. To meet consumer demand for higher current, SAMWHA produces EDLC which features higher power density and longer cycle life.



Specifications

Item	Characteristics	
Operating temperature range	-20 ~ +60℃	
Rated Voltage[Surge]	2.7VDC (2.8V)	
Usable Voltage range	2.7 ~ 0V	
Capacitance tolerance	-10 ~ +20% at 20℃	
Low temperature characteristics	Capacitance change	Within $\pm 30\%$ of initial value at +20℃
	Internal resistance	Less than 200% of initial at +20℃
Endurance[2.7:60℃]	Test time	1000 hours
	Capacitance change	Within $\pm 30\%$ of initial value
	Internal resistance	Less than 200% of initial at specified value
Shelf life[2.7:60℃]	After 1000 hours no load test same as endurance	
Cycle Life [25℃] ⁽¹⁾⁽²⁾	1,000,000 cycles	(1) $\Delta C < 30\%$ and $\Delta ESR < 200\%$ of initially specified value, respectively and LC (specified value)
		(2) Cycle : between rated voltage and half rated voltage under constant current at 25℃

Drawing(not to scale)



Product list

Type	Rated Voltage(V)	Capacity(0~2.7V)		ESR, 1kHz (mΩ)	ESR, DC (mΩ)	LC(72hours) (mA Max.)	Specific Energy		Weight (g)	Dimension ΦD×L(mm)
		[F]	[mAh]				[Wh/kg]	[Wh/L]		
Snap-in	2.7	100	75	10	13	0.27	5.0	5.9	20	22×45
		200	155	7	9	0.52	5.6	6.3	36	30×45
		200	155	5	7	0.54	5.9	5.9	34	35×35
		400	290	3.5	5	1.08	6.2	6.9	65	35×60
Axial	2.7	1200	900	0.45	0.60	3.1	4.1	5.7	290	60×74
		2000	1500	0.3	0.35	5.3	5.0	6.9	400	60×102
		3000	2200	0.24	0.29	8.1	5.7	7.7	525	60×138

* For the special capacitance or design, please contact our sales representatives or product engineers.