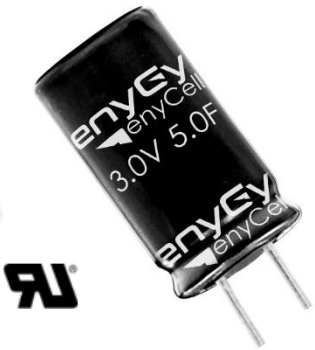
EnyGy® enyCell Series, Radial Type (Electric Double Layer Capacitors)

Datasheet EC3R050510020S

- *Endurance: 3.0V 65°C 1000 hours*
- *High capacitance and small size*
- *Low ESR*
- *Long cycle life*
- *UL recognized*
- *RoHS compliant*



Specifications

Part Number	EC3R050510020S	
Rated Voltage	V	3.0
Capacitance	F	5.0
ESR, 1kHz	mΩ	35
ESR, DC	mΩ	50
LC(72hr)	mA	0.015
Specific Energy	Wh/kg	2.72
Specific Power	kW/kg	19.57
Max. Peak Current	A	6.00
Weight	g	2.30
Volume	mL	1.57

1. Capacitance and Equivalent Series Resistance (ESR) measured according to IEC62391-1 at +25°C, with current in milliamps (mA) = 10*C
2. Leakage Current at 25°C after 72 hour charge and hold
3. Specific Energy (Wh/kg) = (½*C*V^2/3600)/weight
4. Specific Power (kW/kg) = (V^2/4*ESR)/weight
5. Max Peak Current in Amps (A), 1 second discharge from rated voltage to half rated voltage = (½*C*V)/(1+ESR*C)

Characteristics

Operating Temperature Range	-40 ~ +65°C	
Rated Voltage	3.0 VDC	
Capacitance Tolerance	-10% ~ +20%	
Temperature Characteristics	Capacitance change	Within ±5% of initial value at +25℃
	Internal resistance	Within ±50% of initial value at +25℃
Endurance	Duration	1000 hours
	Capacitance charge	Within ≤30% of initial value
	Internal resistance	Within ≤100% of initial specified value
Shelf Life	After 1000 hours no load test same as endurance	
Lifetime at RT(1)	10 years	
Cycle Life(25°C)(2)	500,000 cycles	

(1)|ΔC|≤30% of initial value and |ESR|≤100% of initial specified value.
(2) Cycle : between rated voltage and half rated voltage under constant current at 25℃.

Dimensions Unit:mm

D	10.0
L	20.0
P	5.0
Φd	0.6