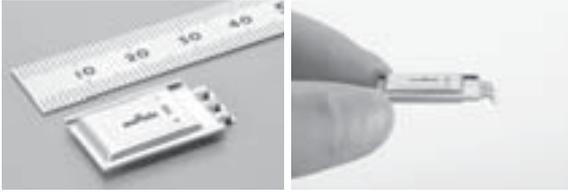


● **Features**

1. Small and slim package (e.g. 21.0×14.0×3.2mm)



2. High power
Higher allowable current than any battery or conventional EDLC

3. High energy
(High rated voltage and High capacitance)
Flexible discharge 400μAh – 1.5A

4. High reliability

Characteristic degradation is reduced by airtight package and optimized electrochemical system

5. Low leakage current: less than 10μA @96hrs

6. Long cycle life exceeding 100k cycles
Maintenance free energy device with flexible charge-discharge profiles

7. Wide operation temperature range: -40 to 70°C

8. Low ESR at lower temperatures
High output or large current charge-discharge is available even at low temperatures where battery output decreases.

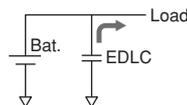
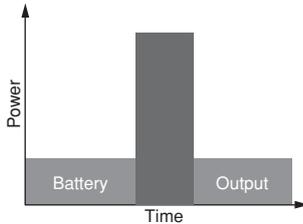


● **Benefits and Applications**

1. Peak Power Assist

Assist the high peak load up to hundreds of milli-seconds
Improve performance of end sets!!

High Paek Power from EDLC



<Benefits>

- Reduce battery load and improve cycle life
- Enable the use of lower power battery or reduction of the number of series connections
- Enable the use of high peak load applications without high power battery

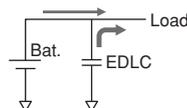
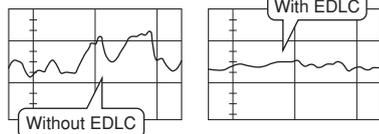
<Applications>

LED flash (DVC, DSC, smart phones), Smart meters (telecommunication system, valve operation, etc), e-paper applications, door lock, laser applications (infrared, etc), Remote Keyless Entry (RKE), etc.

2. Battery Peak Load Leveling

Quick Charge and Discharge of High Energy
Improve operation stability, quality and reliability!!

<Comparison of load current>



<Benefits>

- Secure power line from large load change and power down
- Secure battery power down at lower temperatures

<Applications>

Tablet PC, Smart meter, Point of sale (POS) equipment, Handy terminal, USB/MHL bus power, small motor applications, GPS/GPRS tracking system, portable audio, power tools, fuel cells, primary cell equipment, etc.

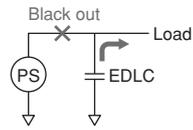
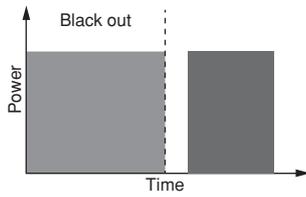
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3. Backup Applications

High power backup!!

Emergency power from EDLC



<Benefits>

- Quick and high power backup is available

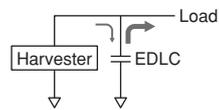
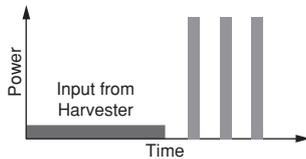
<Applications>

Point of sale (POS) equipment, Handy terminal, Smart meter (Last Gasp), and professional use applications which need communication system backup or data backup

4. Energy Harvesting Systems

Maintenance-free energy storage device with flexible charge -discharge

Prolong cycle life and flexible charge-discharge



<Benefits>

- Small energy loss because of low ESR
- Can be used at wide temperature range

<Applications>

Micro and macro energy harvesting systems