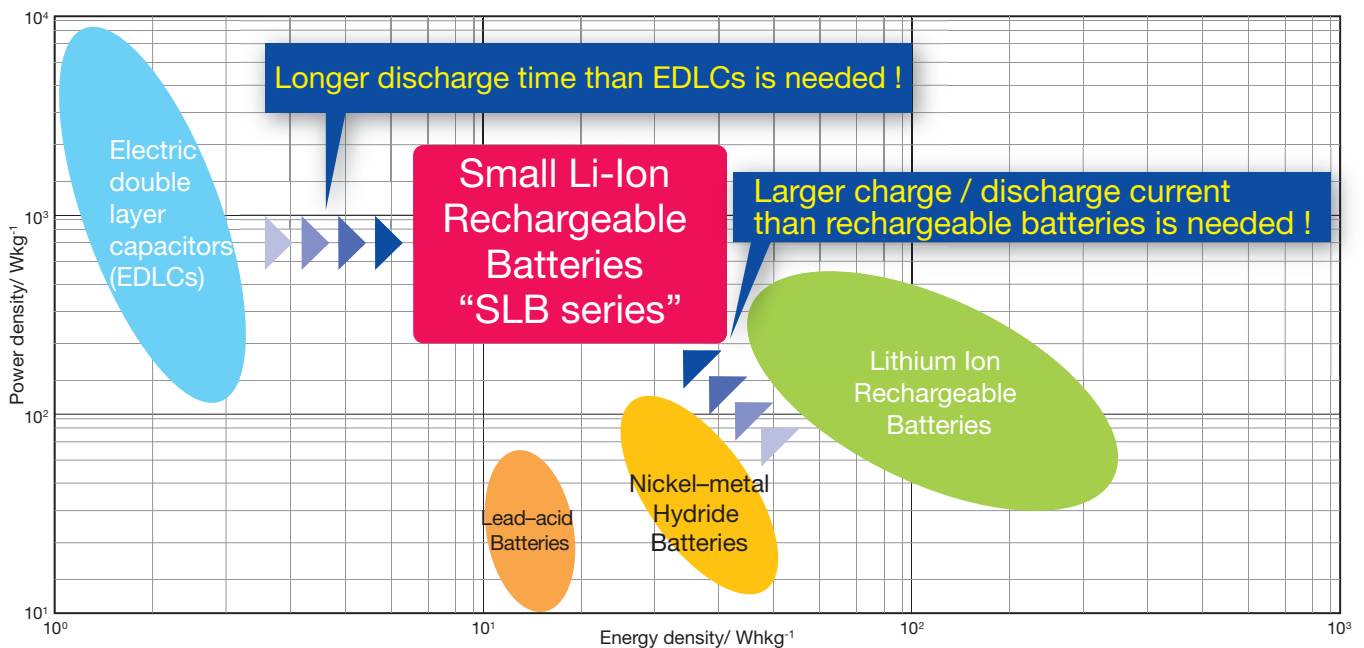


Small Li-Ion Rechargeable Batteries “SLB” Suitable for IoT and Wearable Applications

Small Li-Ion Rechargeable Batteries achieve both high power density and high energy density

Development Background



Product Features

- Long life: Maintains a capacity of 80% or more after 25,000 charging/discharging cycles
[Conditions] Temperature:25°C / Voltage range:1.8 to 2.8V
Charging/discharging rate:10 C / Rest:0sec
- Rapid charging/discharging is possible: Support for 20 C rate rapid charging/discharging
- Low charging current: Capable of charging at 0.01C charging rate
- Low temperature performance: Possible to charge and discharge even in cold regions (-30°C)
- Safety: Extremely low explosion and ignition possibility even if an internal short circuit is forcibly generated



Small Li-Ion Rechargeable Batteries SLB series

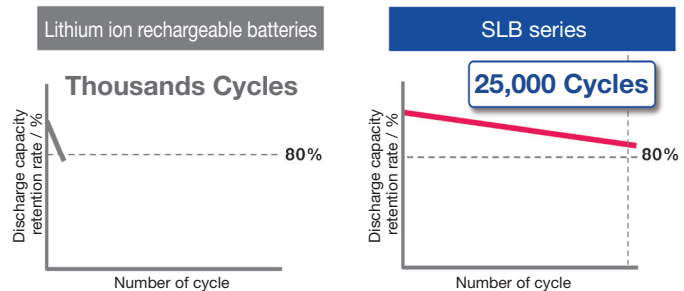
Specifications

| Item | Characteristics | Part number | SLB03070LR35 | SLB03090LR80 | SLB04255L040 | SLB08115L140 | SLB12400L151 |
|---|-----------------|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Nominal voltage | 2.4V | Size (mm) | φ 3×7L | φ 3.3×9L | φ 4×25.5L | φ 8×11.5L | φ 12.5×40L |
| Max. charge voltage (Under continuous charge) | 2.8V | Nominal capacity (mAh) | 0.35 | 0.8 | 4 | 14 | 150 |
| Discharge cutoff voltage (Under continuous discharge) | 1.8V | Max. charge / discharge current (mA) | 7 | 16 | 80 | 280 | 3000 |
| Temperature range | -30 to 60°C | Weight (g) | 0.12 | 0.16 | 0.75 | 1.2 | 9.0 |

Features of Small Li-Ion Rechargeable Batteries "SLB"

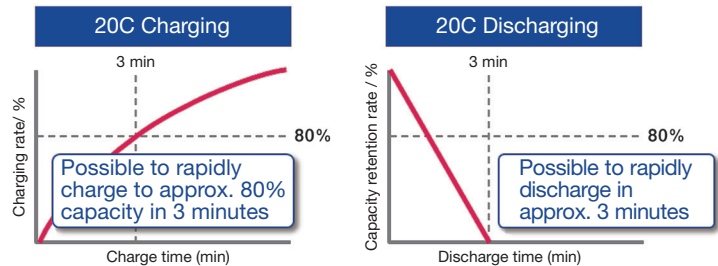
1 Long life

Maintain a capacity of at least 80% after 25,000 charging/discharging cycles



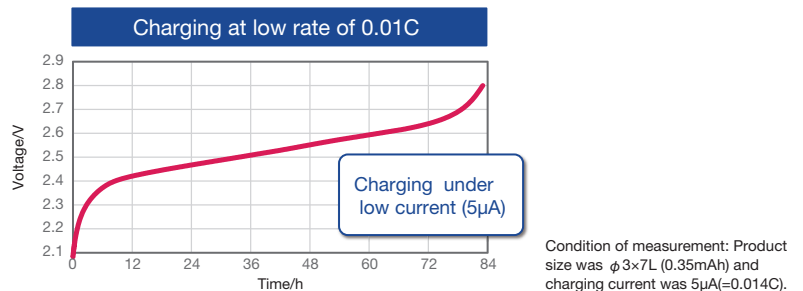
2 Rapid charge/discharge

High input/output density approaching electric double layer capacitors (EDLCs)



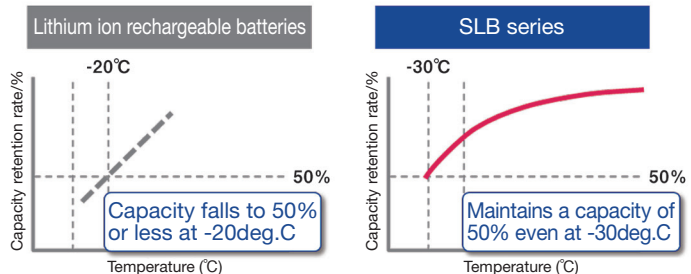
3 Low charging current

Capable of charging at low rate using energy harvesting



4 Low temperatures

Possible to use in cold regions (-30deg.C)



5 Safety

Extremely low possibility of explosion or ignition even when used under harsh conditions

Extremely low risk of rupture or ignition and high safety.



Safe

Safety Test

Crushing by pressure After test



Nail penetration After test



- We have confirmed these batteries are safe with no explosions or ignition in crush, nail insertion, blunt nail, external short circuit, overcharge and forced discharge tests.

UL1642

Certification for Lithium-ion Battery



- UL1642 and IEC62133-2 : 2017 certified product.

NICHICON CORPORATION

URL <https://www.nichicon.co.jp/english>

| | | |
|--|---|---|
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※ The data provided is for introduction purposes and is not guaranteed value.



SAFETY PRECAUTIONS

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