

Removable Flashlight

Application Note



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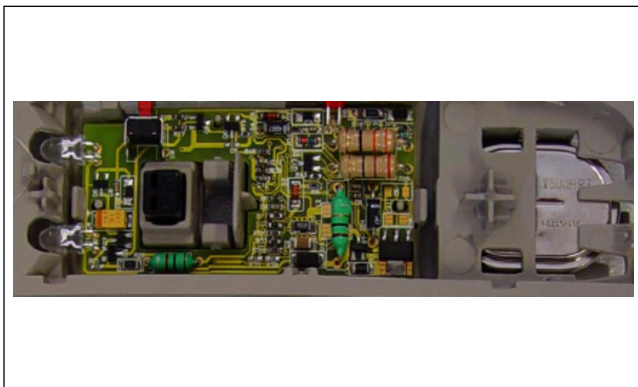
A removable flashlight in the car gives car manufacturers the possibility to extend brand awareness to the customer by focusing on increased comfort and multi useable standard accessories.

Battery challenge

Weight, thickness, reliability at extended temperatures in the automotive environment is one of the most important features for removable flashlight as well as long shelf life respectively steady availability in charged state with high stability against overcharging. The battery must supply high discharge currents to drive the two LEDs at a DC/DC converter.

Technical solution

The V500HT cell out of the powerful85 family of Ni-MH button cells from VARTA Microbattery is specially designed for high discharge currents and extended temperature.



Characteristics	1/V500HT Battery
Voltage level	1.2V (other voltages possible)
Max discharge current	1.5A continuous
Capacity	500mAh
Overcharge capability	5-15mA for 5 years @ RT
Weight	14g
Discharge Temperature Range	-20 to + 85°C

In Car Illumination Battery

VARTA Microbattery's Ni-MH HRT batteries (Powerful85C family) offer rechargeable battery solutions with reliable power for supplying In car illumination with an independent usage time up to 1h. Configurations: 1/V500HT or 2/V500HT

- wide temperature range from -20 to +85°C
- long lifetime – up to 10 years
- high reliability – by special sealing construction with new plastic materials
- high current capability
- design flexibility on voltage level from 1.2V to 12V
- design flexibility on battery shape side-by-side or stacked and voltage level from 1.2V to 3.6V
- simple charging system – continuous charging possible
- UL recognized cell
- environmentally friendly Ni-MH technology