

FEATURES

- Lithium-Ion 18650 rechargeable battery.
- Cylindrical Li-ion cell.
- PCP Protected with internal PCB voltage protection.
- 2.6Ah (2600 mAh) Capacity.
- Resistance 250mΩ.
- Built-in overcharge protection.
- Built-in over discharge protection,
- Built-in over current and short protection.

RS PRO, 3.7V, 18650, Lithium-Ion Rechargeable Battery, 2.6Ah

RS Stock No.: 880-1558



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

The RS PRO 18650 lithium battery has a capacity of 2.6Ah (2600 mAh) and was designed for high-intensity torches such as high demanding LED torches. The Li-ion battery is PCB protected, 3.7 V of power, and is an excellent choice for high draining devices, enabling them to run much longer than other power sources. Every 18650 rechargeable battery is designed with a PCB functionality, acting as the brains of the battery which regulates the output and intake of the electrical charge. The circuit board ensures the battery is always safe to use and charge, as it cuts off the battery if the voltage drops below 2.5 V or exceeds 4.25 V. Includes circuit protection increasing the overall size to 18.9 mm x 70 mm.

General Specifications

Size	18650
Chemistry	Lithium-Ion
Applications	High intensity torches, LED Power torches, Electronics, High draining device

Electrical Specifications

Capacity	2.6Ah
Nominal Voltage	3.7V
Terminal Type	Flat
Standard Charging Current	480 mA
Rapid Charging Current	2400 mA

PCM Specifications

Parameter	Criteria
Overcharge Detection Voltage	4.280±0.025V
Overcharge Detection Delay Time	0.92-1.4s
Over Discharge Detection Voltage	2.800±0.050V
Over Discharge Detection Delay Time	115-173ms
Discharge Over Current Detection	5.0~9.0A
Over Current Detection Delay Time	7.2-11.0m
Short Circuit Detection Delay Time	220-360us
Current Consumption In Normal	3μA Type 6.0μA Max

Mechanical Specifications

Dimensions	18.9 mm x 70 mm.
Diameter	18mm
Wire Length	65 mm

Operation Environment Specifications

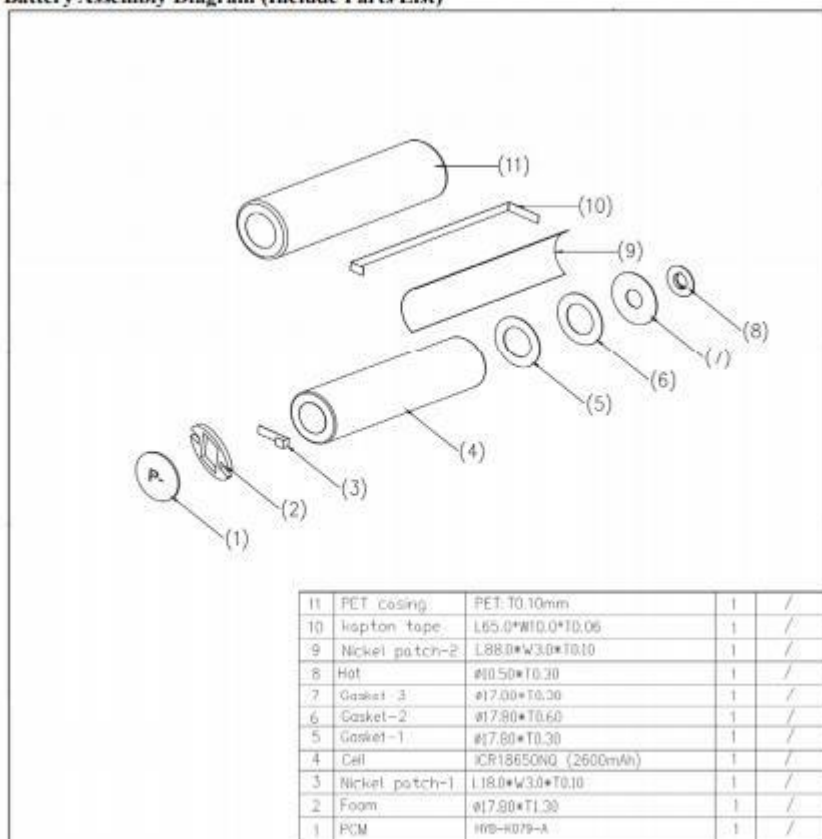
Operating Temperature Range	-20°C to 60°C
Maximum Operating Temperature	60°C
Minimum Operating Temperature	-20°C

Approvals

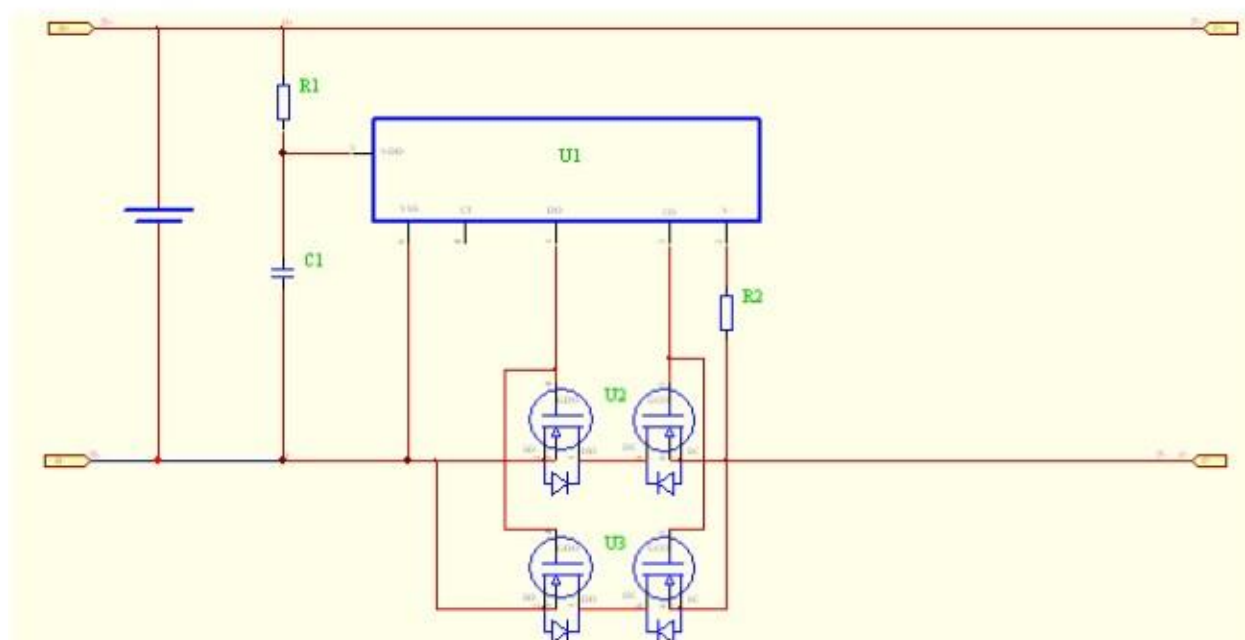
Compliance/Certifications	UN, RoHS
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17. Battery Assembly Diagram (Include Parts List)



2. Circuit Diagram



3. PCB Parts List

Item	Part Name	Description	QTY	Footprint	Supplier	Remarks
1	U1	S-8261-G3M	1pcs	SOT-23-6	SEIKO	
2	U2,U3	AO8810	2pcs	TSSOP-8	AOS	
3	R1	SMD 470R, $\pm 5\%$	1pcs	0603	YAGEO	
4	R2	SMD 2K, $\pm 5\%$	1pcs	0805	YAGEO	
5	C1	SMD 0.1 μ F, $\pm 5\%$, 50V	1pcs	0603	YAGEO	
6	B+ B-	3.0*3.0*0.3 mm	2pcs		FUJIADA	
7	PCB	ϕ 17.8 \times 1.0mm	1pcs	HYB-K079-A	MEIYADI	FR4 2 Layer

5. PCM Assemble Mechanical Drawing PCB Outline Unit: mm

4.4 Bottom Layer

