Liter energy battery 582728

Liter energy battery 3.7V 400mAh Lipo Battery (Model 582728) Instruction Manual

Model: 582728 | Brand: Liter energy battery

Introduction

This manual provides essential instructions for the safe and effective use of your Liter energy battery 3.7V 400mAh Lithium Polymer (Lipo) battery, model 582728. Please read this manual thoroughly before use and retain it for future reference.
The Liter energy battery 582728 is a high-quality rechargeable lithium polymer battery featuring a protective IC for enhanced safety and longevity. It offers excellent safety and discharge performance, with a compact and lightweight design.

Safety Precautions

Failure to follow these safety instructions can result in fire, personal injury, or property damage.

- Charge Li-Po battery with a compatible Li-Po battery charger only.
- Always charge the Li-Po battery on a heat-resistant surface.
- Inspect the battery for any damage before charging or operating. Do not use if damaged.
- Never charge the Li-Po battery unattended.
- Do not allow Li-Po cells to overheat at any time.
- Do not over-discharge the Li-Po battery.
- Ensure correct polarity during connection: Red wire is Positive (+), Black wire is Negative (–).
- Never connect or allow the two wires to touch each other to avoid short circuits.
- Double-check soldering and connections to prevent reverse polarity, which can damage your device.
- Keep batteries out of reach of children.
- Do not puncture, disassemble, or modify the battery.
- Dispose of batteries according to local regulations.

Specifications

Feature	Detail
Model Number	582728
Voltage	3.7V
Typical Capacity	400mAh
Minimum Capacity	300mAh
Material	Lithium Polymer
Connector Type	2P PH2.0mm Pitch JST Connector
Dimensions (WxLxH)	27mm x 28mm x 5.8mm
Weight	Approximately 0.317 ounces (9 grams)
Protection Function	PCM (Protection Circuit Module) for overload, short circuit, over-temperature protection.
Recommended Uses	Camera, Digital devices, GPS, Bluetooth headsets, Smart watches, Car recorders, Home security systems, WiFi transmitters, Bluetooth earplugs. *Not suitable for drones.*

Multiple Protection

Overcharge protection

Overdischarge protection

Short Cicuit protection

Overvoltage protection

Overcurrent protection

Image: Diagram illustrating the physical dimensions (Width, Length, Height) of the 582728 battery and its JST-PH-2.0 connector.

Product use

Image: Visual representation of common applications for the 582728 battery, including cameras, car recorders, smart watches, Bluetooth headsets, tablet PCs, home security systems, WiFi transmitters, and Bluetooth earplugs.

Setup and Connection

1. **Verify Compatibility:** Before connecting, ensure the battery's voltage (3.7V), capacity (400mAh), and physical dimensions (27x28x5.8mm) are compatible with your device. Confirm the connector type is 2P PH2.0mm Pitch. If the connector does not match, it may need to be replaced by a qualified technician, paying close attention to polarity.
2. **Check Polarity:** Identify the red wire as Positive (+) and the black wire as Negative (–) on the battery's JST connector. Ensure these match the polarity requirements of your device. Incorrect polarity can cause damage.
3. **Secure Connection:** Carefully plug the JST connector into the corresponding port on your device. Ensure a firm and secure connection to prevent intermittent power supply or short circuits.

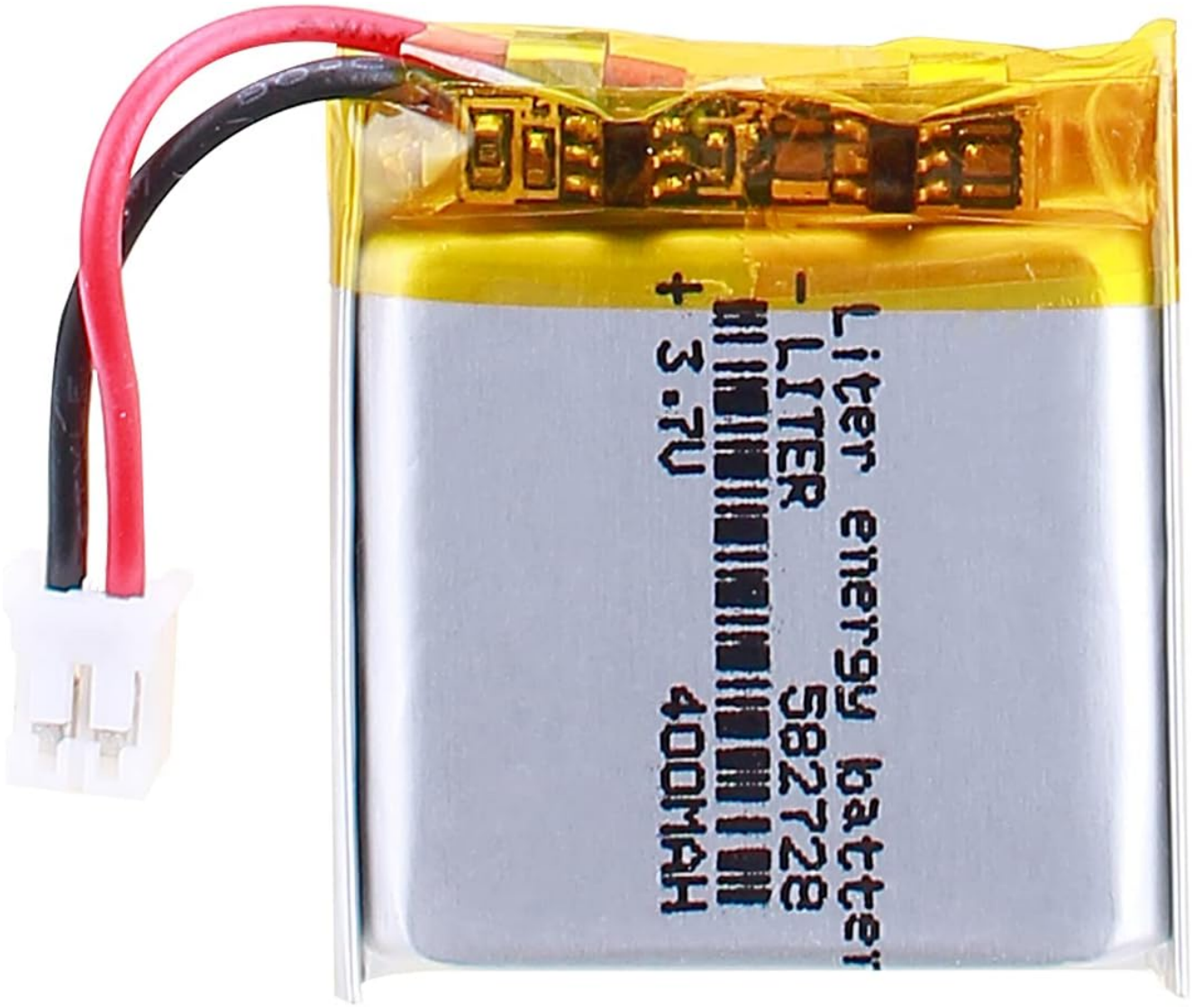


Image: The Liter energy battery 582728, showing its compact form factor and the attached JST connector with red and black wires.

Operating Instructions

Charging the Battery

- Use only a dedicated Li-Po battery charger.
- Place the battery on a non-flammable, heat-resistant surface during charging.
- Monitor the battery during charging to prevent overheating.
- Do not overcharge the battery. The integrated PCM provides overcharge protection.

Discharging the Battery

- The battery is designed for a maximum discharge current of 2.0C (at -20°C to +60°C).
- Avoid over-discharging the battery, as this can reduce its lifespan. The PCM provides over-discharge protection.

Capacity:4000mAh

LP582728

Voltage: 3.7V

Charge Ending Voltage:4.20±0.03V

Discharge Ending Voltage:2.75V

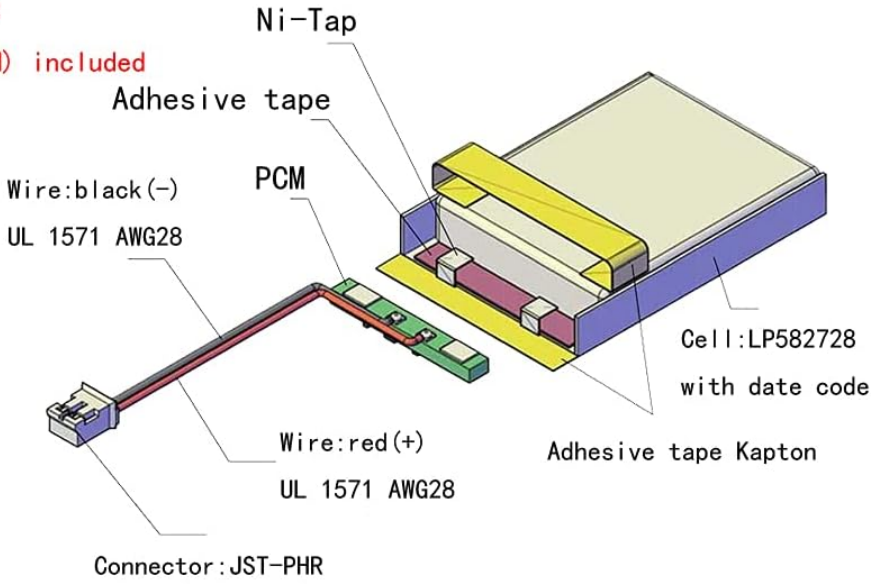
Max.Charging Current:2.0C (5°C～+45°C)

Max. Discharging Current:2.0C (-20°C～+60°C)

Charge Temperature:0~45°C

Discharge Temperature:-20~+60°C

Battery Protection Circuit (PCM) included



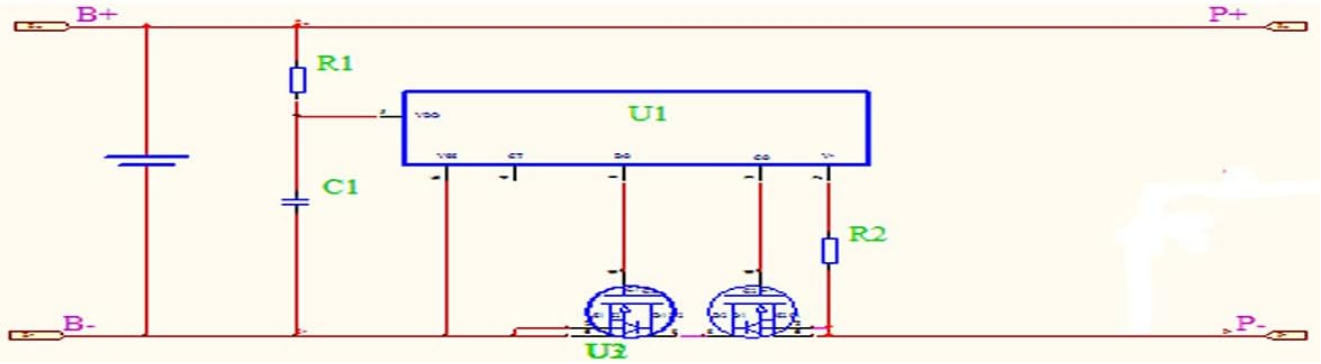


Image: Technical diagram detailing the battery's capacity, voltage, charging/discharging parameters, and internal components including the PCM (Battery Protection Circuit) and JST-PHR connector.

Maintenance and Storage

- **Long-Term Storage:** For extended storage, keep the battery charged to 40-60% of its capacity (approximately 3.7V-4.0V).
- **Recharge Frequency:** If stored for a long period, recharge the battery every 3 months to maintain its voltage within the recommended range.
- **Storage Environment:** Store the battery in a cool, dry place, away from direct sunlight, extreme temperatures, and flammable materials.
- **Cleaning:** Keep the battery and its connectors clean and free from dust or debris. Use a dry, soft cloth for cleaning.

Troubleshooting

Problem	Possible Cause	Solution
Battery not charging	Incorrect charger, faulty charger, poor connection, battery damage.	Ensure a compatible Li-Po charger is used. Check charger functionality. Verify secure connection. Inspect battery for visible damage; discontinue use if damaged.
Device not powering on	Battery not charged, incorrect polarity, loose connection, battery damage, device fault.	Charge the battery. Verify correct polarity (Red+, Black-). Ensure connector is firmly seated. Inspect battery for damage. Test device with another known-good power source if possible.
Battery overheating during charge/discharge	Overcharging, excessive discharge rate, internal short circuit, environmental factors.	**Immediately disconnect the battery. Discontinue use. This indicates a serious issue and the battery should be safely disposed of.**
Shortened battery life	Frequent over-discharge, improper storage, high temperature exposure, age.	Follow recommended charging and storage guidelines. Avoid deep discharge. Store in a cool, dry place.

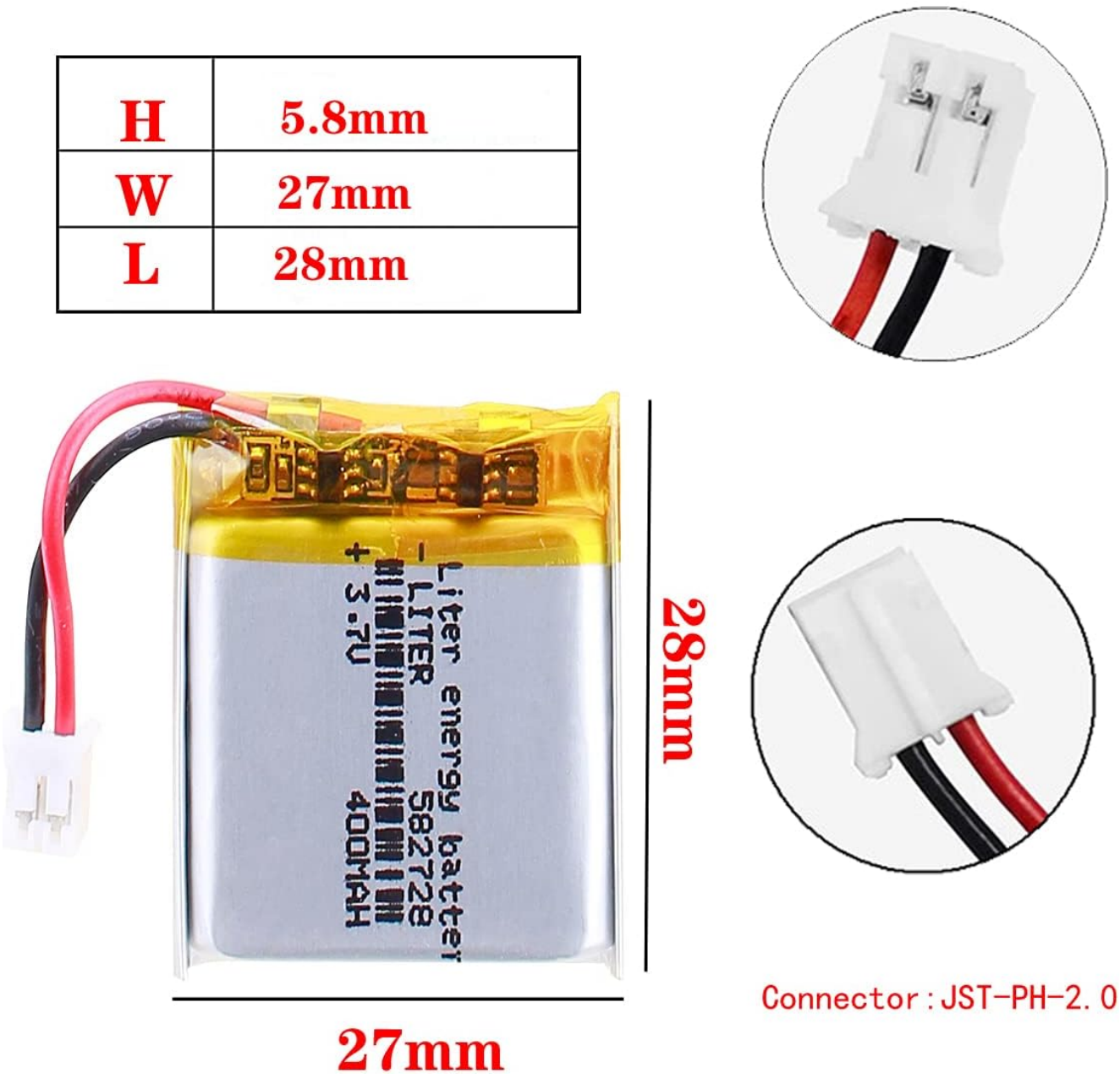


Image: Diagram highlighting the multiple protection features integrated into the battery, including overcharge, overdischarge, short circuit, overvoltage, and overcurrent protection.

Warranty and Support

For any questions or concerns regarding your Liter energy battery product, please contact the manufacturer or seller directly via the Amazon message system.
The manufacturer, BIHUADE, provides support for this product. Please refer to your purchase documentation for specific warranty terms and conditions.
Contact information for Liter energy battery can be found on their Amazon Store Page.