

# 6-DZM-12<sub>(12V12Ah)</sub>

# E-Bike Battery

DZM series VRLA Gel Battery is specially designed for motive power applications including electric bikes/scooters, electric tricycles, electric motorcycles and other device require DC power source. With international leading technologies and State-of-the-art automated manufacturing, DZM series offer long cycle life, large current discharge capability, high consistency, reliability and safety, and environmental-friendly.

## Features and Benefits

- **Long Cycle Life:** Exceptional cyclic performance above 600 cycles @80% DoD.
- **Reliable Seal Structure:** Mount in any position except inverted
- **Optimal Design:** Besides the benefits of VRLA battery, it is maintainable that can prolong the service life by up to 50%-100% or more.
- **Multi-purpose Application:** The battery can be floating application as well as cyclic application.
- **Low Self-discharge:** Adopted high quality grid alloy and high purity electrolyte, low self-discharge and low water- loss.
- **High Reliability and Safety:** Adopted enhanced ABS container and special design safety valve to ensure battery high durable, safe and reliable.

## Applications

- Electric Bike / Scooters
- Electric Tricycles
- Electric Tools and Toys
- Mini Solar Power System

## Product Specifications

Nominal Voltage (V)	12 (6 cells per unit)
Nominal Capacity (25°C)	12 Ah @ 2HR-rate (to 1.75Vpc)
Dimension (mm)	L151mm x W99mm x H99mm
Approx. Weight	4.20 kg (9.26 lbs)
Terminal Type	Female Copper Insert M5
Internal Resistance	≤ 0.016 Ohm (fully charged)
Initial Charge Current	≤2.0A
Self Discharge	Approx. 2.0% per month @ 20°C
Ambient Temperature	Discharge: -20~55°C Charge: -20~45°C Storage: -20~45°C
Float Charge Voltage	13.5~13.8V/block @25°C
Cycle Use Charge Voltage	14.7~14.9V/block @25°C
Container Material	ABS (UL94-V0 optional)



## Complied standards

- IEC 61056-1
- GB/T 22199
- GB/T 19639-1
- JIS C8702-1

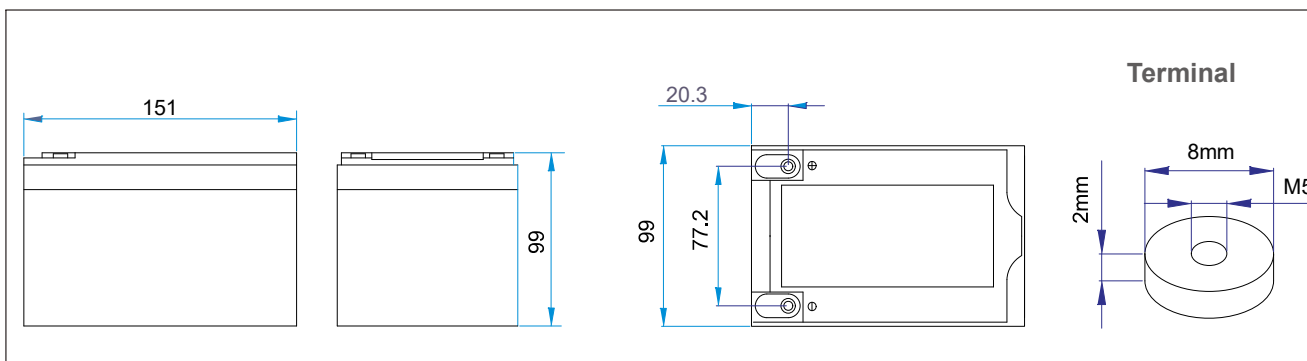


Optimized Structural Design High Quality Active Material



Typical Application

## Battery Dimensions

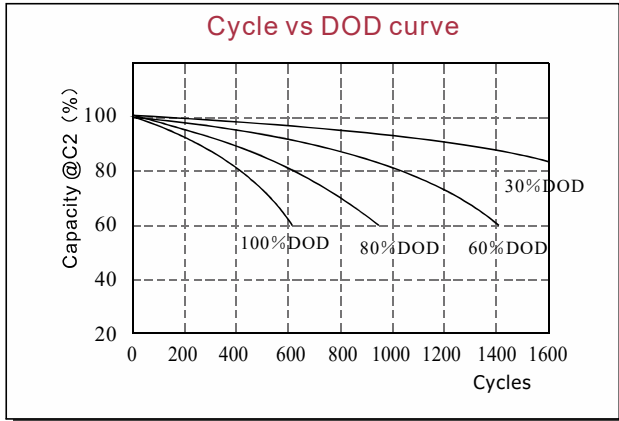


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## Cyclic Characteristics

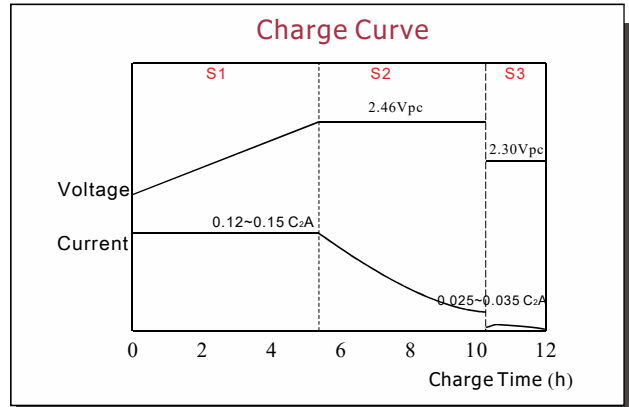
High cycle performance,  
up to 400 ~ 600 cycle at 100%DOD



## Charge Characteristics

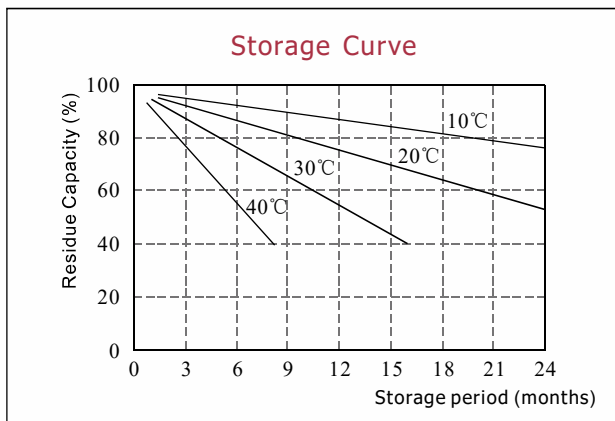
**Recommend 3 Stage Charge Mode:**

- S1: Charge with constant current 0.12C2A~0.15C2A to 2.46Vpc, then turn to step 2.
- S2: Charge with constant voltage 2.46Vpc to current drop to 0.03C2A, then turn to step 3.
- S3: Trickle charge with constant voltage 2.30Vpc, end charge as current approaches zero.



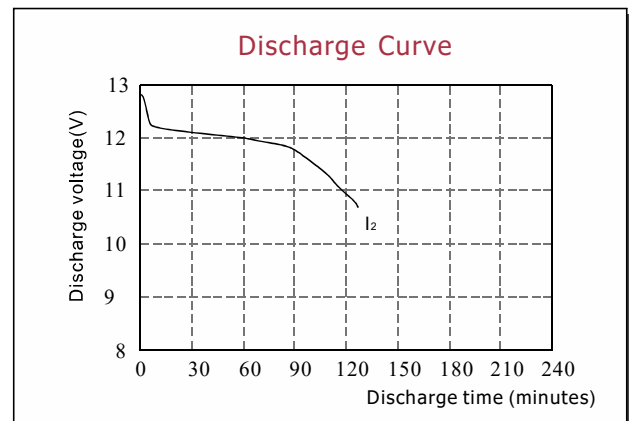
## Self-Discharge Characteristics

Capacity >90% after 90 days storage

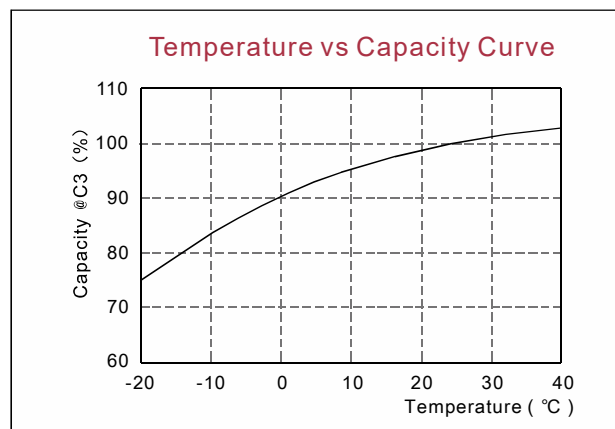


## Discharge Characteristics

Discharge current, DZM: I<sub>2</sub>;(on 12V block)



## Temperature Characteristics



## Open Circuit Voltage Characteristics

