



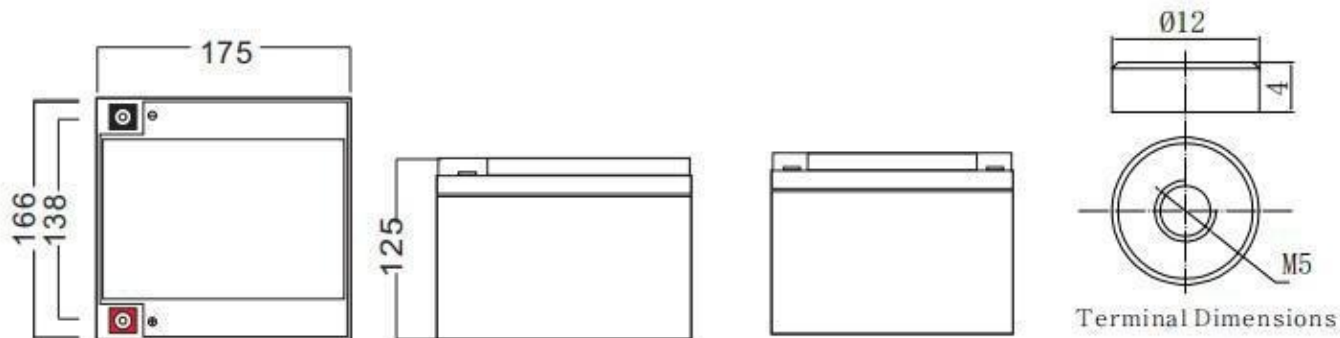
# JH Series High-Rate battery JH12-102W-2

## General Features

- ▶High corrosion resistant performance: Pb-Ca multi-alloy grid
- ▶High energy density and power density
- ▶Optimized capability of instant high-current discharging
- ▶Excellent charge acceptance ability
- ▶Excellent deep cycle discharge capability
- ▶Strong high and low temperature performance
- ▶Precision sealing technology
- ▶Long life

Dimension:175(L)×166(W) ×125(H)×125(TH)± 2

Unit: mm



## Specification

|                                             |                                             |
|---------------------------------------------|---------------------------------------------|
| Nominal Voltage                             | 12V                                         |
| Nominal Capacity                            | 28Ah(102W@15min-rate to 1.67V percell@25°C) |
| Design life                                 | 10 years                                    |
| Terminal                                    | M5                                          |
| Approx. Weight                              | Approx8.8kg (19.4lbs)                       |
| Container Material                          | ABS(UL94-HB, UL94-V0 Optional)              |
| Maximum discharge current                   | 420A(5 seconds)                             |
| Internal resistance(Full charged at 25°C: ) | 7.0 mΩ                                      |
| Self discharge                              | 3% of capacity declined per month at 25°C   |

## Operating Temperature

|            |                      |
|------------|----------------------|
| Discharge: | -20 ~50°C(-4~ 122°F) |
| Charge :   | -20 ~50°C(-4~ 122°F) |
| Storage:   | -20 ~50°C(-4~ 122°F) |

## Charge Method(25 °C)

|                            |                        |
|----------------------------|------------------------|
| Charge current:            | Max. 8.4A;Recom.2.8A   |
| Float charge:13.5-13.8V    | recom.13.8V(-18mV/ °C) |
| Equalize charge:13.8-14.1V | recom.14.1V(-24mV/ °C) |
| Cycle charge:14.4-15.0V    | recom.14.7V(-30mV/ °C) |

## Standards

Standard IEC 60896-21; IEC 60896-22; JIS C8702-1

## Applications

- ▶UPS/EPS
- ▶Power systems
- ▶Telecommunications system
- ▶Emergency lighting, Auto control system
- ▶Solar/wind generating storage cyclic
- ▶Other general purpose

## Rated Capacity

|                              |        |
|------------------------------|--------|
| 20Hour Rate (1.40A to 10.5V) | 28.0Ah |
| 3Hour Rate (7.36A to 10.2V)  | 22.1Ah |
| 1Hour Rate (17.9A to 9.6V)   | 17.9Ah |

## Attain Certificate

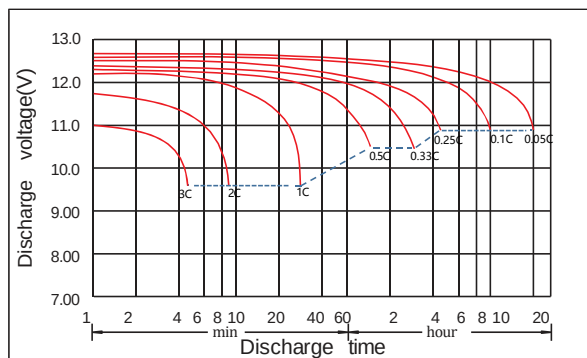
|                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  | <b>RoHS</b>                                                                           |
|  |  |  |  |

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

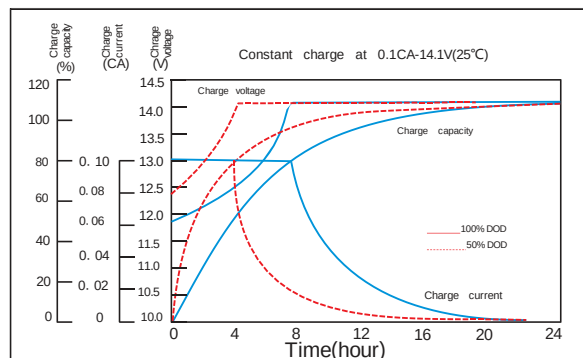


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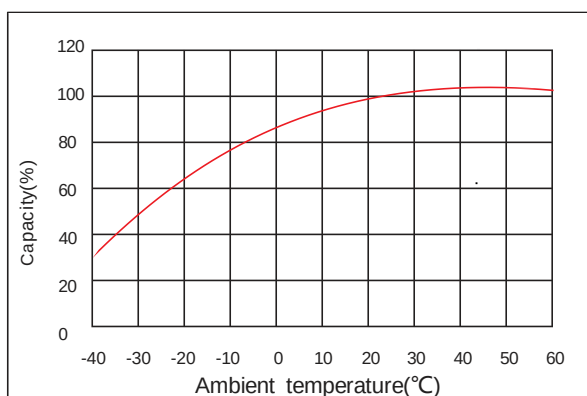
## Discharge characteristic



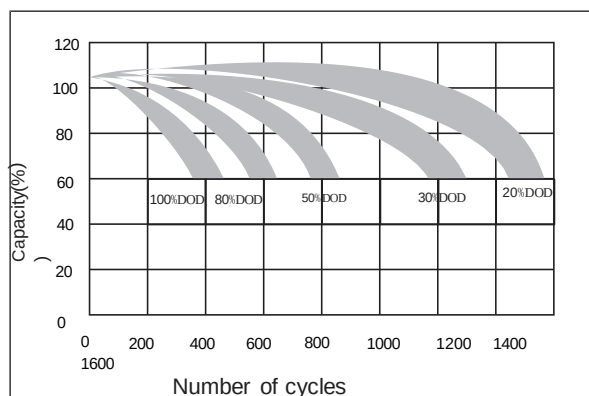
## Charging characteristic



## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Constant Current Discharge Characteristics Unit:A (25°C,77°F)

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 97.0 | 76.0  | 56.8  | 31.9  | 22.0  | 17.9 | 14.2 | 10.6 | 7.73 | 6.19 | 5.26 | 3.99 | 3.47 | 2.77 | 1.48 |
| 1.67V   | 85.1 | 67.1  | 54.6  | 30.7  | 21.5  | 17.5 | 13.7 | 10.2 | 7.50 | 5.99 | 5.15 | 3.95 | 3.42 | 2.74 | 1.46 |
| 1.70V   | 79.4 | 63.1  | 53.0  | 30.2  | 21.1  | 17.2 | 13.5 | 10.0 | 7.36 | 5.68 | 5.10 | 3.88 | 3.36 | 2.69 | 1.43 |
| 1.75V   | 71.1 | 57.2  | 51.2  | 29.1  | 20.6  | 16.8 | 13.2 | 9.72 | 7.25 | 5.60 | 4.87 | 3.79 | 3.28 | 2.63 | 1.40 |
| 1.80V   | 63.2 | 51.7  | 49.6  | 27.9  | 20.1  | 16.4 | 13.0 | 9.46 | 6.86 | 5.49 | 4.68 | 3.72 | 3.19 | 2.58 | 1.34 |
| 1.85V   | 55.7 | 46.4  | 46.9  | 26.9  | 19.5  | 15.9 | 12.5 | 8.89 | 6.45 | 5.16 | 4.40 | 3.50 | 3.00 | 2.43 | 1.26 |

## Constant Power Discharge Characteristics Unit: W/cell (25°C,77°F)

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 155  | 122   | 104   | 59.3  | 40.0  | 33.3 | 26.5 | 19.8 | 14.6 | 11.7 | 9.94 | 7.88 | 6.55 | 5.37 | 2.94 |
| 1.67V   | 142  | 112   | 102   | 57.6  | 39.1  | 32.6 | 25.8 | 19.1 | 14.2 | 11.3 | 9.75 | 7.73 | 6.45 | 5.27 | 2.86 |
| 1.70V   | 135  | 107   | 99.1  | 56.8  | 38.8  | 32.3 | 25.5 | 18.7 | 14.0 | 10.8 | 9.47 | 7.67 | 6.39 | 5.23 | 2.84 |
| 1.75V   | 124  | 100   | 96.1  | 55.4  | 38.5  | 32.1 | 25.4 | 18.3 | 13.8 | 10.6 | 9.29 | 7.49 | 6.13 | 5.11 | 2.78 |
| 1.80V   | 114  | 93.0  | 93.5  | 53.6  | 37.9  | 31.6 | 25.2 | 18.2 | 13.4 | 10.5 | 9.05 | 7.33 | 5.92 | 5.00 | 2.76 |
| 1.85V   | 103  | 85.8  | 90.2  | 52.0  | 37.2  | 31.0 | 24.4 | 17.1 | 12.6 | 9.87 | 8.51 | 6.89 | 5.56 | 4.70 | 2.59 |