

## 6-EVF-58.3

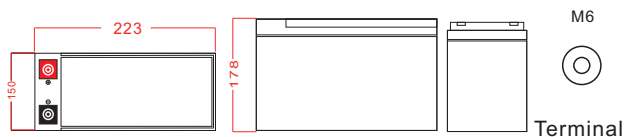


### General Features

- High Corrosion Resistant Performance: Pb-Ca multi-alloy grid
- High Energy Density and Power Density
- Excellent Charge Acceptance Ability
- Strong High and Low Temperature Performance
- Optimized Capability of instant High-current Discharging
- Low self-discharge rate



Dimension: 223(L)×150(W)×178(H)×178TH) Unit: mm



### Applications

- Electric vehicle
- Electric wheelchair
- Electric scooter
- Electric play car for children
- Garbage truck
- Patrol car

### Specification

|                       |                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------|
| Nominal Voltage       | 12V                                                                                           |
| Nominal Capacity      | 58.3Ah                                                                                        |
| Design life           | 5 years                                                                                       |
| Terminal              | M6                                                                                            |
| Approx. Weight        | Approx16.0kg (35.36lbs)                                                                       |
| Container Material    | ABS                                                                                           |
|                       | 67.4Ah 10Hour Rate (6.74A to 10.5V)                                                           |
| Rated Capacity        | 58.3Ah 3Hour Rate (19.4A to 10.5V)                                                            |
|                       | 47.6Ah 1Hour Rate (47.6A to 10.5V)                                                            |
| Operating Temperature | Discharge: -20 ~50℃(-4~ 122°F)<br>Charge: -20 ~50℃(-4~ 122°F)<br>Storage: -20 ~50℃(-4~ 122°F) |
| Charge Method (25 °C) | Float Use:13.7-13.9V@25℃<br>Cycle Use :14.7-14.9V,@25℃<br>Max charge current 11.6A            |
| Self discharge        | 3% of capacity declined per month at 25℃                                                      |

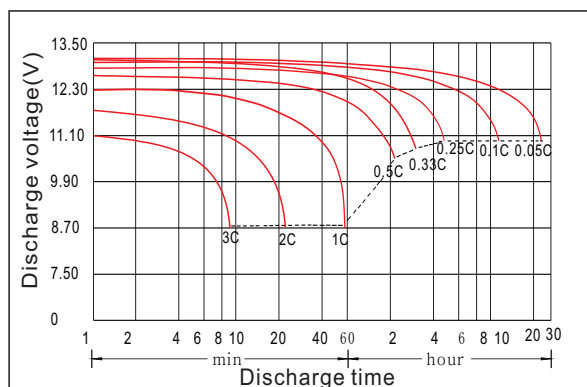
### Constant Current Discharge Characteristics Unit: A (25℃, 77°F)

| F.V/Time | 5Min  | 15Min | 30Min | 1h   | 2h   | 3h   | 5h    | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|------|------|------|-------|------|------|------|
| 1.60V    | 267.5 | 155.8 | 90.8  | 49.1 | 28.3 | 20.1 | 12.28 | 7.76 | 6.38 | 3.55 |
| 1.65V    | 259.9 | 152.3 | 89.4  | 48.7 | 28.1 | 19.9 | 13.28 | 7.70 | 6.32 | 3.54 |
| 1.70V    | 249.1 | 148.7 | 87.8  | 48.3 | 27.9 | 19.6 | 12.09 | 7.64 | 6.26 | 3.52 |
| 1.75V    | 229.6 | 144.0 | 87.0  | 47.6 | 27.5 | 19.4 | 12.00 | 7.58 | 6.20 | 3.50 |
| 1.80V    | 204.7 | 133.4 | 82.9  | 46.5 | 27.0 | 19.3 | 11.72 | 7.52 | 6.14 | 3.48 |
| 1.85V    | 183.0 | 120.4 | 76.0  | 43.0 | 25.6 | 18.2 | 11.06 | 7.21 | 5.95 | 3.42 |

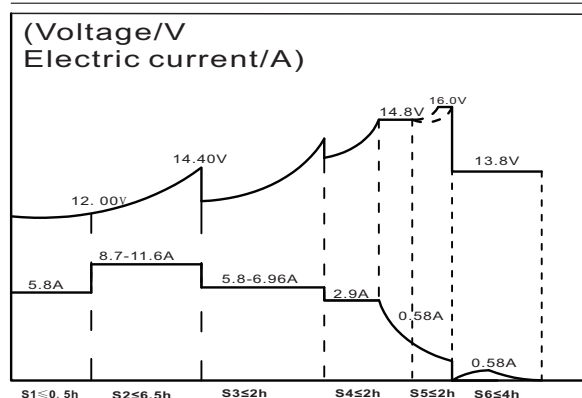
### Constant Power Discharge Characteristics Unit: W/cell(25℃, 77°F)

| F.V/Time | 5Min  | 15Min | 30Min | 1h   | 2h   | 3h   | 5h    | 8h    | 10h   | 20h  |
|----------|-------|-------|-------|------|------|------|-------|-------|-------|------|
| 1.60V    | 448.3 | 276.2 | 164.5 | 92.6 | 53.4 | 38.3 | 23.34 | 15.09 | 12.23 | 7.02 |
| 1.65V    | 431.0 | 270.3 | 163.4 | 92.0 | 53.3 | 37.8 | 23.25 | 14.90 | 12.14 | 6.99 |
| 1.70V    | 428.8 | 267.9 | 163.4 | 91.3 | 53.1 | 37.5 | 23.16 | 14.90 | 12.05 | 6.95 |
| 1.75V    | 399.6 | 265.6 | 162.3 | 90.5 | 52.9 | 37.3 | 22.97 | 14.72 | 11.96 | 6.93 |
| 1.80V    | 367.1 | 251.4 | 157.8 | 89.8 | 52.7 | 37.1 | 22.78 | 14.72 | 11.77 | 6.89 |
| 1.85V    | 328.1 | 224.3 | 145.4 | 83.4 | 50.3 | 35.4 | 21.66 | 14.17 | 11.59 | 6.83 |

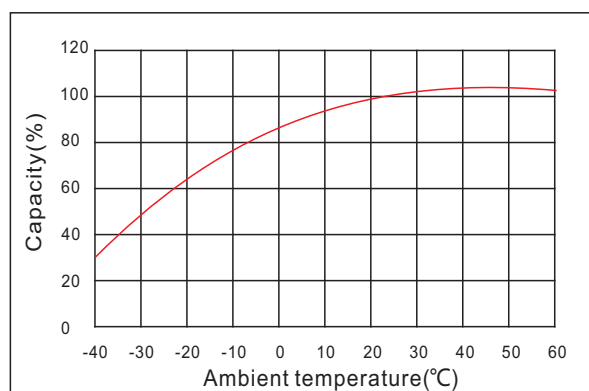
### Discharge characteristic



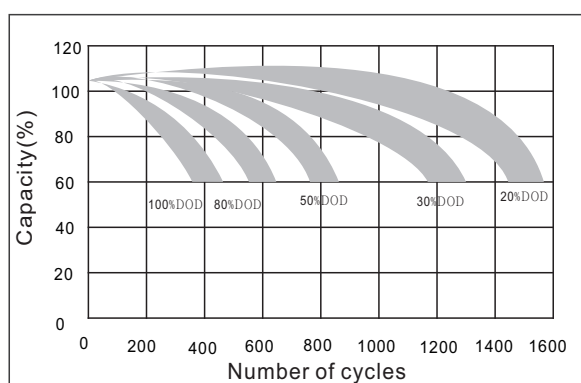
### Charging characteristic



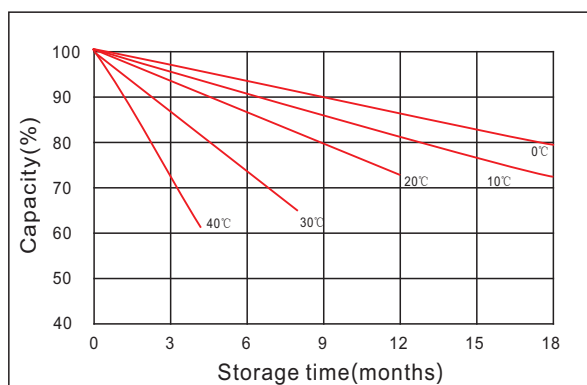
### The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Curves of self-discharge



### Curves of open circuit voltage vs. capacity

