

## GENERAL FEATURES

- Environmentally friendly
- Can be used at vertical or horizontal orientation
- High Reliability and Good Quality
- High gas recombination efficiency
- High Power Density
- Maintenance-Free Operation

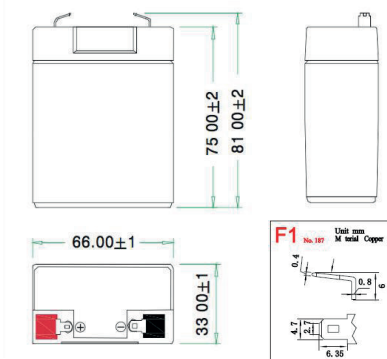
## APPLICATIONS

- UPS & EPS
- Emergency lighting Systems
- Medical Equipment
- Cable TV Systems
- Alarm Systems
- Electric Test Equipment
- Security Systems



## DIMENSIONS & WEIGHT

|                  |         |
|------------------|---------|
| Length(mm)       | 47±1    |
| Width(mm)        | 66±1    |
| Height(mm)       | 33±1    |
| Total Height(mm) | 75±1    |
| Weight(kg)       | 0.33±3% |



## COMPLIED STANDARDS

|                 |              |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704    |
| YD/T799         | BS6290 part4 |
| GB/T 19639      | UL 1989      |

## TECHNICAL SPECIFICATIONS

| Nominal Voltage                                       |                            | 4V(2 cells per unit)                                          |
|-------------------------------------------------------|----------------------------|---------------------------------------------------------------|
| Design Floating Life @25°C                            |                            | 5 Years                                                       |
| Nominal Capacity @25°C(20 hour rate@0.200A,10.50V)    |                            | 3.00Ah                                                        |
| Capacity @25°C                                        | 10 hour rate (0.27A,10.8V) | 2.70Ah                                                        |
|                                                       | 5 hour rate (0.51A,10.5V)  | 2.60Ah                                                        |
|                                                       | 1 hour rate (1.8A,9.6V)    | 1.80Ah                                                        |
| Internal Resistance                                   | Full Charged Battery@25°C  | ≤30.0mΩ                                                       |
| Ambient Temperature                                   | Discharge                  | -20°C~50°C                                                    |
|                                                       | Charge                     | -20°C~50°C                                                    |
|                                                       | Storage                    | -20°C~50°C                                                    |
| Max.Discharge Current@25°C                            |                            | 60A(5s)                                                       |
| Capacity affected by Temperature<br>(10 hr Capacity ) | 40°C                       | 102%                                                          |
|                                                       | 25°C                       | 100%                                                          |
|                                                       | 0°C                        | 80%                                                           |
|                                                       | -15°C                      | 50%                                                           |
| Self-Discharge@25°C per Month                         |                            | 3%                                                            |
| Charge (Constant Voltage) @25°C                       | Floating Charge            | Initial Charging Current Less than 0.9A<br>Voltage 4.50-4.60V |
|                                                       | Cycle Charge               | Initial Charging Current Less than 0.9A<br>Voltage 4.80-5.00V |



## BATTERY DISCHARGE TABLE

### Discharge Constant Current per Cell (Amperes at 25°C)

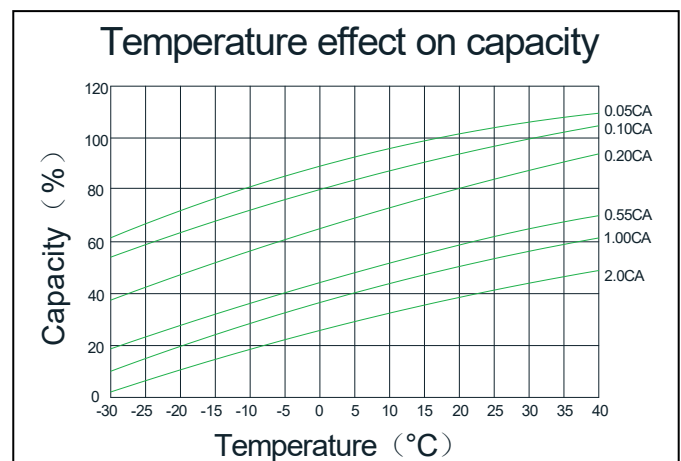
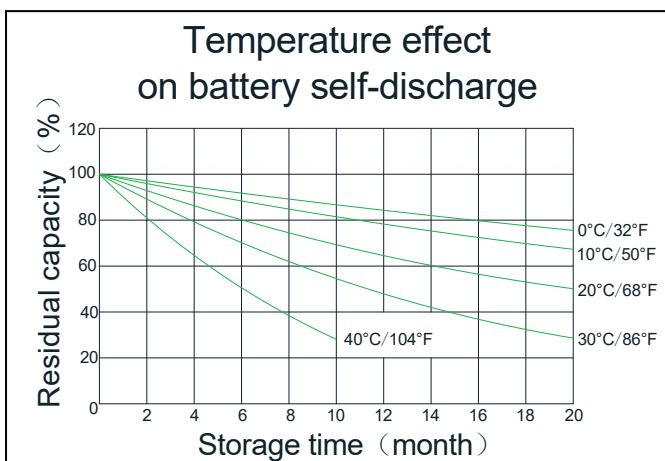
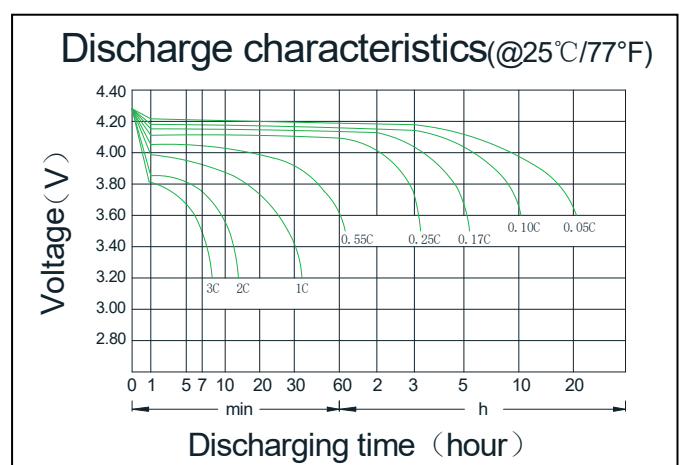
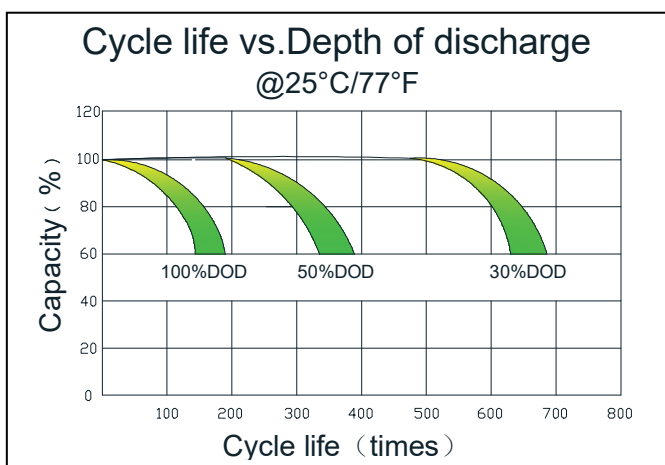
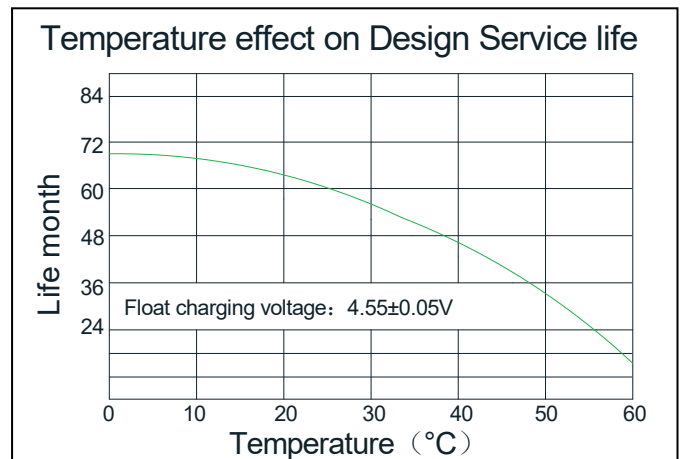
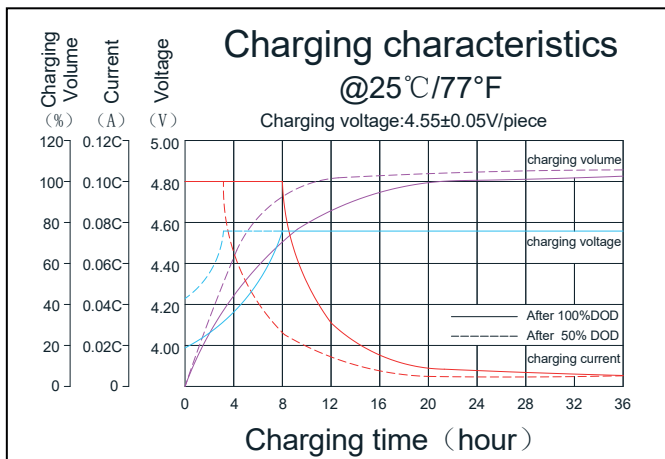
| F.V/Time | 5min  | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h    | 5h    | 8h    | 10h   | 20h   |
|----------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|
| 1.60V    | 10.31 | 7.46  | 5.87  | 3.44  | 2.41  | 2.06 | 1.22 | 0.833 | 0.555 | 0.368 | 0.300 | 0.158 |
| 1.67V    | 10.13 | 7.37  | 5.71  | 3.38  | 2.36  | 2.03 | 1.19 | 0.818 | 0.548 | 0.368 | 0.293 | 0.155 |
| 1.70V    | 9.94  | 7.17  | 5.58  | 3.32  | 2.32  | 1.99 | 1.17 | 0.803 | 0.533 | 0.360 | 0.293 | 0.153 |
| 1.75V    | 9.75  | 6.83  | 5.42  | 3.25  | 2.27  | 1.95 | 1.15 | 0.788 | 0.525 | 0.353 | 0.285 | 0.150 |
| 1.80V    | 9.38  | 6.75  | 5.25  | 3.13  | 2.19  | 1.88 | 1.10 | 0.758 | 0.503 | 0.338 | 0.285 | 0.149 |

### Discharge Constant Power per Cell (Watts at 25°C)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h    | 8h    | 10h   | 20h   |
|----------|------|-------|-------|-------|-------|------|------|------|-------|-------|-------|-------|
| 1.60V    | 19.9 | 14.7  | 11.3  | 6.62  | 4.64  | 3.97 | 2.34 | 1.60 | 1.07  | 0.720 | 0.593 | 0.313 |
| 1.67V    | 19.5 | 14.5  | 11.0  | 6.50  | 4.55  | 3.90 | 2.30 | 1.57 | 1.04  | 0.705 | 0.585 | 0.305 |
| 1.70V    | 19.1 | 14.2  | 10.7  | 6.38  | 4.46  | 3.83 | 2.25 | 1.55 | 1.03  | 0.690 | 0.570 | 0.300 |
| 1.75V    | 18.8 | 13.3  | 10.4  | 6.26  | 4.38  | 3.76 | 2.21 | 1.52 | 1.01  | 0.683 | 0.563 | 0.296 |
| 1.80V    | 18.0 | 12.9  | 10.1  | 6.02  | 4.22  | 3.61 | 2.12 | 1.46 | 0.968 | 0.653 | 0.548 | 0.292 |

**Note** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

## PERFORMANCE CHARACTERISTICS



## BATTERY CONSTRUCTION



| Component | Positive plate                               | Negative plate                                            | Container & Cover      | Safety valve                        | Terminal                  | Separator                                            | Electrolyte                       | Pillar seal                 |
|-----------|----------------------------------------------|-----------------------------------------------------------|------------------------|-------------------------------------|---------------------------|------------------------------------------------------|-----------------------------------|-----------------------------|
| Features  | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca grid for improved recombination efficiency | ABS (UL94-V0 optional) | Flame Si-Rubbeand aging resistancer | Female Copper Insert (F1) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid | Two layers epoxy resin seal |