

## 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

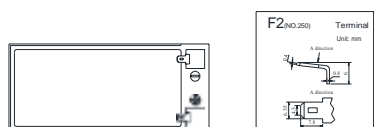
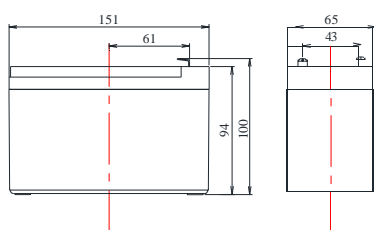
## APPLICATIONS

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



## DIMENSIONS & WEIGHT

|                  |         |
|------------------|---------|
| Length(mm)       | 151±1   |
| Width(mm)        | 65±1    |
| Height(mm)       | 94±1    |
| Total Height(mm) | 100±1   |
| Weight(kg)       | 2.03±3% |



## COMPLIED STANDARDS

|                 |              |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704    |
| YD/T799         | BS6290 part4 |
| GB/T 19638      | UL 1989      |

## TECHNICAL SPECIFICATIONS



|   |                            |  |
|---|----------------------------|--|
| Nominal Voltage                                   |                            | 12V(6 cells per unit)  |
| Design Floating Life @25°C                        |                            | 5 Years  |
| Nominal Capacity @25°C(20 hour rate@0.35A,10.50V) |                            | 7.00Ah   |
| Capacity @25°C                                    | 10 hour rate (0.66A,10.8V) | 6.60Ah   |
|   | 5 hour rate (1.25A,10.5V)  | 6.25Ah   |
|   | 1 hour rate (4.57A,9.6V)   | 4.57Ah   |
| Internal Resistance                               | Full Charged Battery @25°C | ≤22.0mΩ  |
| Ambient Temperature                               | Discharge                  | -20°C~50°C   |
|   | Charge                     | -20°C~50°C   |
|   | Storage                    | -20°C~50°C   |
| Max.Discharge Current@25°C                        |                            | 105A(5s)   |
| Short circuit current                             |                            | 150A   |
| Capacity affected by Temperature (10 hr Capacity) | 40°C                       | 102%   |
|   | 25°C                       | 100%   |
|   | 0°C                        | 85%  |
|   | -15°C                      | 65%  |
| Self-Discharge@20-25°C per Month                  |                            | 3%   |
| Charge (Constant Voltage) @25°C                   | Standby Use                | Initial Charging Current Less than 2.10A<br>Voltage 13.6-13.8V |
|   | Cycle Use                  | Initial Charging Current Less than 2.10A<br>Voltage 14.4-14.9V |

## BATTERY DISCHARGE TABLE

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

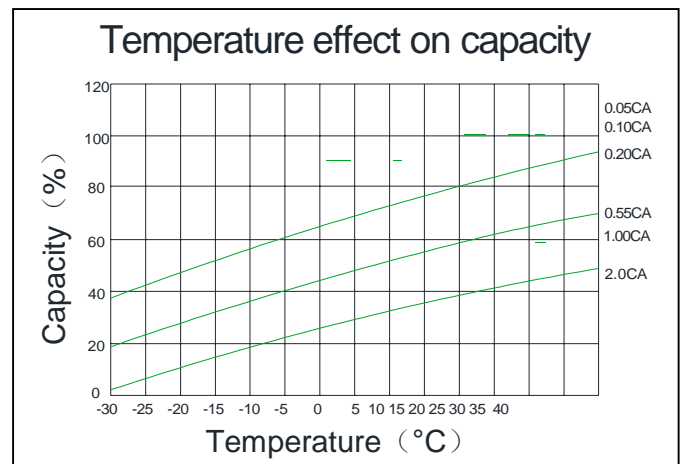
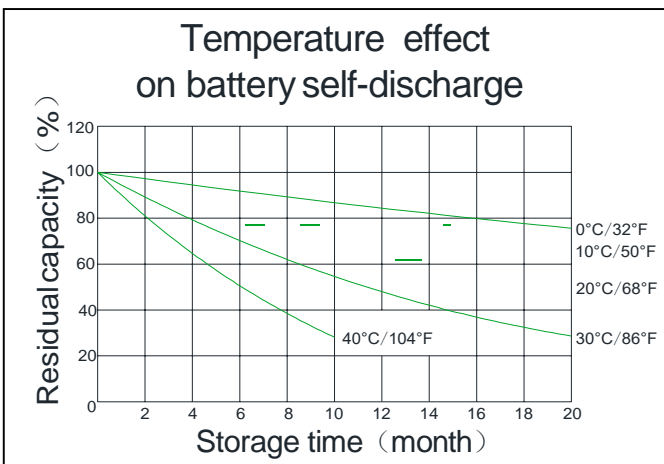
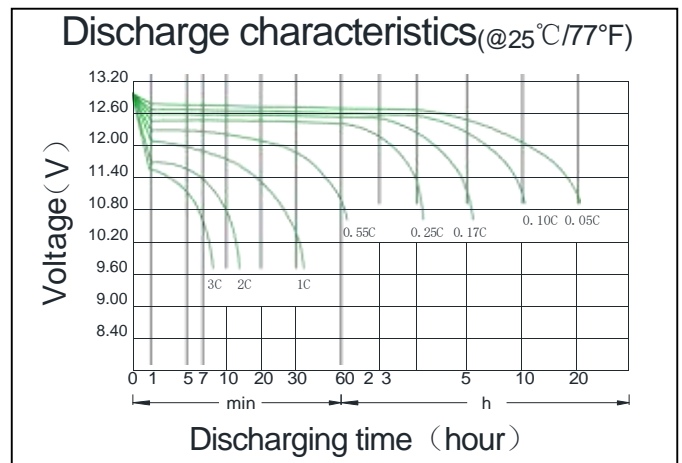
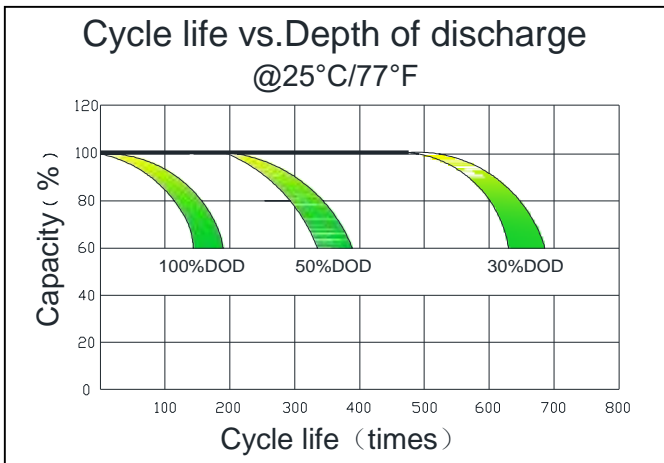
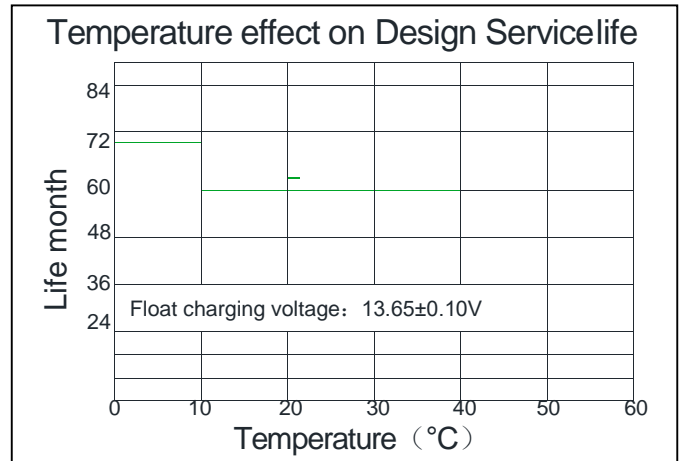
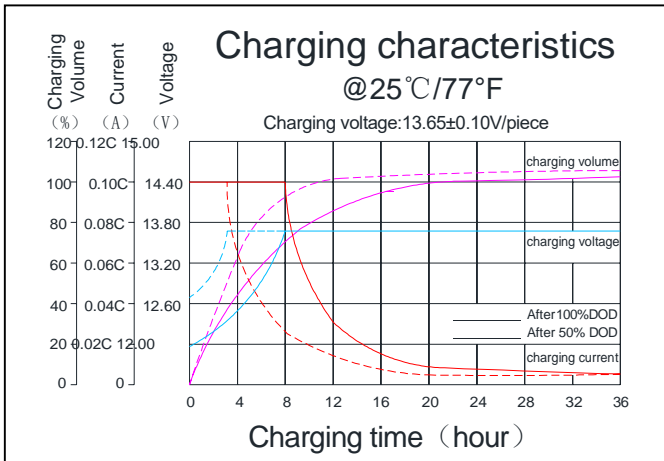
| F.V/Time | 5min  | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h   |
|----------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| 1.60V    | 27.94 | 18.32 | 13.45 | 7.98  | 5.82  | 4.57 | 2.89 | 1.98 | 1.32 | 0.89 | 0.70 | 0.370 |
| 1.67V    | 26.62 | 17.56 | 13.16 | 7.85  | 5.73  | 4.42 | 2.84 | 1.94 | 1.30 | 0.87 | 0.69 | 0.363 |
| 1.70V    | 25.50 | 16.60 | 12.98 | 7.75  | 5.66  | 4.28 | 2.78 | 1.91 | 1.27 | 0.85 | 0.68 | 0.357 |
| 1.75V    | 24.30 | 15.83 | 12.29 | 7.49  | 5.51  | 4.15 | 2.73 | 1.87 | 1.25 | 0.84 | 0.67 | 0.350 |
| 1.80V    | 22.44 | 14.75 | 11.47 | 7.19  | 5.33  | 4.03 | 2.63 | 1.80 | 1.20 | 0.82 | 0.66 | 0.346 |

### 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    | 52.03 | 35.16 | 26.00 | 15.53 | 11.36 | 8.99 | 5.67 | 3.91 | 2.62 | 1.77 | 1.40 | 0.738 |
| 1.67V    | 49.86 | 33.74 | 25.50 | 15.31 | 11.21 | 8.68 | 5.57 | 3.83 | 2.56 | 1.74 | 1.39 | 0.727 |
| 1.70V    | 47.81 | 31.91 | 25.21 | 15.14 | 11.10 | 8.37 | 5.47 | 3.76 | 2.52 | 1.72 | 1.38 | 0.718 |
| 1.75V    | 45.80 | 30.47 | 23.92 | 14.68 | 10.83 | 8.06 | 5.37 | 3.69 | 2.47 | 1.70 | 1.36 | 0.703 |
| 1.80V    | 42.70 | 28.49 | 22.36 | 14.14 | 10.50 | 7.75 | 5.15 | 3.55 | 2.38 | 1.66 | 1.34 | 0.700 |

**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. Contact **MCA** for the latest information.

## 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/F2) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid | Two layers epoxy resin seal |