

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

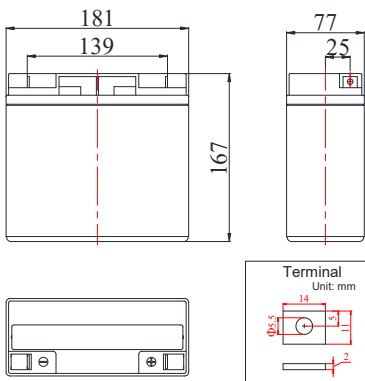
APPLICATIONS

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



DIMENSIONS & WEIGHT

| | |
|------------------|---------|
| Length(mm) | 181±1 |
| Width(mm) | 77±1 |
| Height(mm) | 167±1 |
| Total Height(mm) | 167±1 |
| Weight(kg) | 5.18±3% |



COMPLIED STANDARDS

| | |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704 |
| YD/T799 | BS6290 part4 |
| GB/T 19639 | 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@0.90A,10.50V) | | 18Ah |
| Capacity @25°C | 10 hour rate (1.69A,10.8V) | 16.9Ah |
| | 5 hour rate (3.21A,10.5V) | 16.05Ah |
| | 1 hour rate (11.75A,9.6V) | 11.75Ah |
| Internal Resistance | Full Charged Battery@25°C | ≤17.0mΩ |
| Ambient Temperature | Discharge | -20°C~50°C |
| | Charge | -20°C~50°C |
| | Storage | -20°C~50°C |
| Max.Discharge Current@25°C | | 270A(5s) |
| Capacity affected by Temperature (10 hr Capacity) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-Discharge@25°C per Month | | 3% |
| Charge (Constant Voltage) @25°C | Floating Charge | Initial Charging Current Less than 5.4A Voltage 13.6-13.8V |
| | Cycle Charge | Initial Charging Current Less than 5.4A Voltage 14.4-14.9V |

BATTERY DISCHARGE TABLE

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

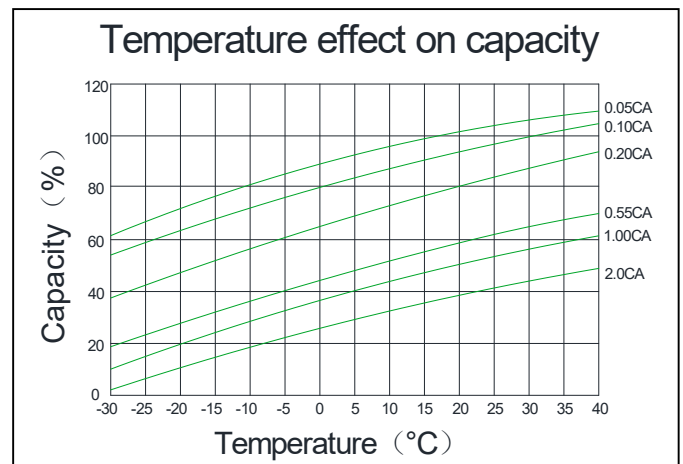
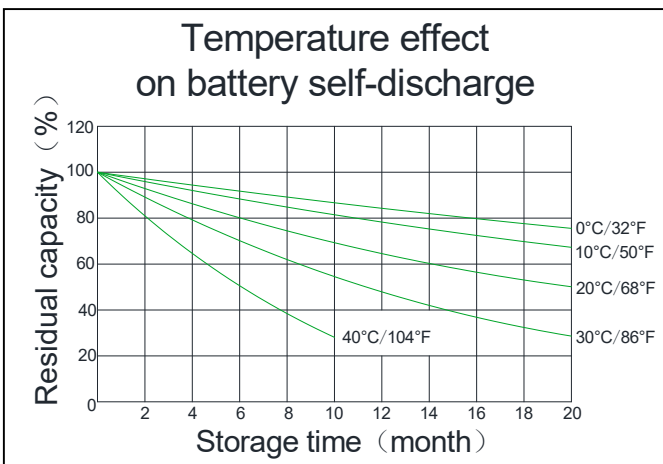
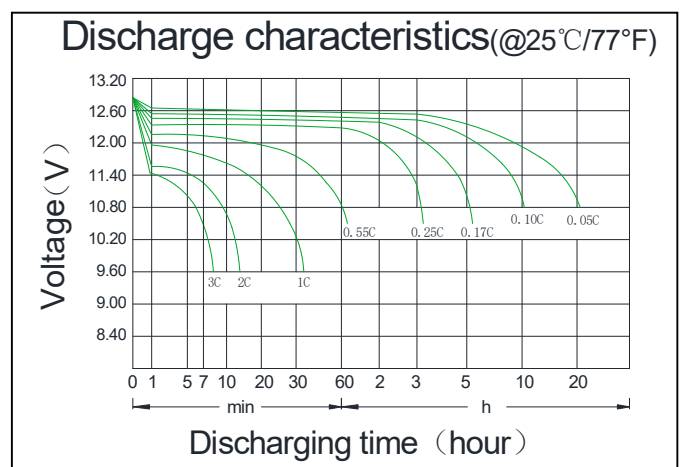
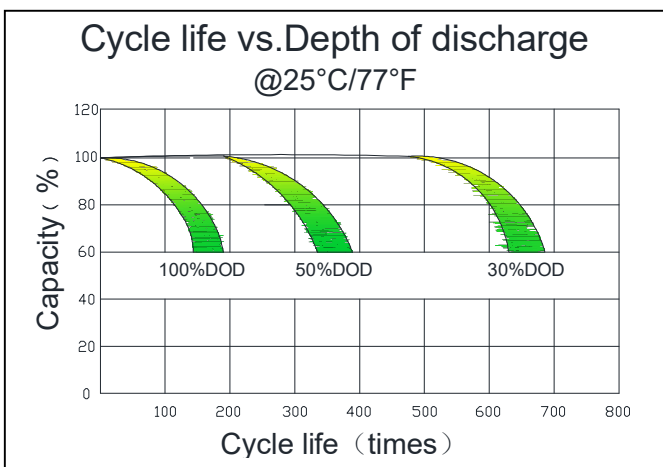
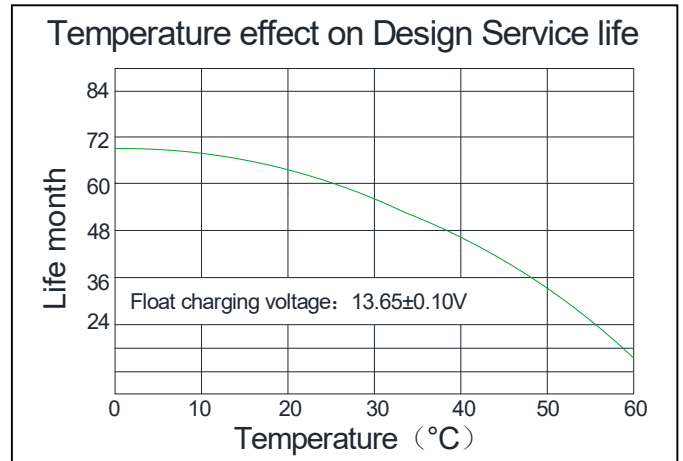
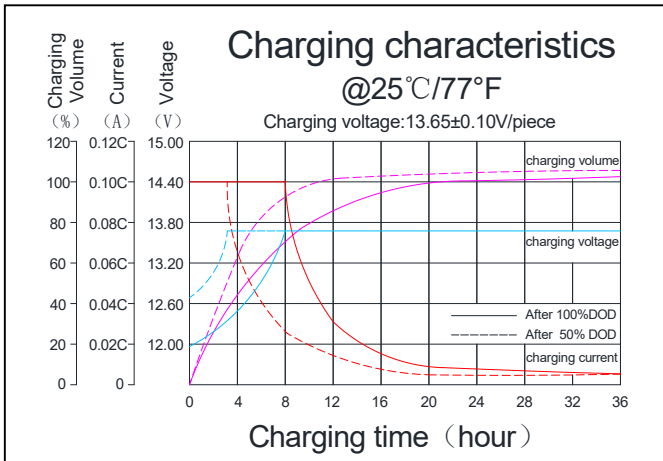
| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|
| 1.60V | 71.85 | 47.11 | 34.59 | 20.53 | 14.97 | 11.75 | 7.43 | 5.09 | 3.39 | 2.28 | 1.80 | 0.951 |
| 1.67V | 68.44 | 45.15 | 33.84 | 20.19 | 14.73 | 11.37 | 7.30 | 4.99 | 3.34 | 2.23 | 1.78 | 0.933 |
| 1.70V | 65.57 | 42.69 | 33.38 | 19.92 | 14.54 | 11.01 | 7.15 | 4.91 | 3.27 | 2.19 | 1.75 | 0.918 |
| 1.75V | 62.50 | 40.71 | 31.60 | 19.26 | 14.16 | 10.67 | 7.02 | 4.81 | 3.21 | 2.17 | 1.72 | 0.900 |
| 1.80V | 57.71 | 37.92 | 29.49 | 18.49 | 13.69 | 10.36 | 6.76 | 4.63 | 3.09 | 2.11 | 1.69 | 0.890 |

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 | 133.79 | 90.41 | 66.86 | 39.93 | 29.21 | 23.12 | 14.58 | 10.04 | 6.73 | 4.54 | 3.61 | 1.898 |
| 1.67V | 128.21 | 86.75 | 65.57 | 39.37 | 28.83 | 22.32 | 14.32 | 9.86 | 6.59 | 4.48 | 3.58 | 1.869 |
| 1.70V | 122.94 | 82.05 | 64.83 | 38.93 | 28.54 | 21.52 | 14.06 | 9.67 | 6.49 | 4.41 | 3.55 | 1.846 |
| 1.75V | 117.77 | 78.34 | 61.51 | 37.75 | 27.85 | 20.73 | 13.80 | 9.49 | 6.36 | 4.38 | 3.49 | 1.808 |
| 1.80V | 109.80 | 73.27 | 57.50 | 36.36 | 27.00 | 19.93 | 13.25 | 9.12 | 6.12 | 4.26 | 3.45 | 1.800 |

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 L1 (torque: 4~6N.m) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid | Two layers epoxy resin seal |