

GENERAL FEATURES

- Environmentally friendly
- Able to operate at 60°C
- Integrated design to ensure the best uniformity and reliability
- Long life and high stability under high temp. environment (no air-con needed)
- Use super-C additives: Deep discharge recovery capability

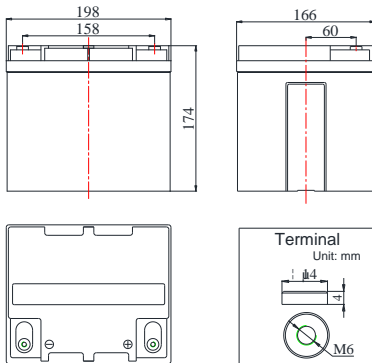
APPLICATIONS

- Solar & Wind energy system
- BTS Stations
- UPS system
- Telecom systems
- Wheel chair & Golf Car
- Marine Equipment
- Railway Systems



DIMENSIONS & WEIGHT

| | |
|-------------------|---------|
| Length (mm) | 198±1 |
| Width (mm) | 166±1 |
| Height (mm) | 174±1 |
| Total Height (mm) | 174±1 |
| Weight (kg) | 14.6±3% |



COMPLIED STANDARDS

| | |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704 |
| YD/T1360 | BS6290 part4 |
| GB/T 19638 | UL 1989 |

TECHNICAL SPECIFICATIONS



| | | |
|--|-----------------------------|--|
| Nominal Voltage | | 12V(6 cells per unit) |
| Design Floating Life @ 25° C | | 15 Years |
| Nominal Capacity @25°C 20 hour rate@2.70A,10.50V) | | 48Ah |
| Capacity @ 25° C | 10 hour rate (4.51A,10.8V) | 45.1Ah |
| | 5 hour rate (7.60A,10.5V) | 38.0Ah |
| | 1 hour rate (26.7A,9.6V) | 26.7Ah |
| Internal Resistance | Full Charged Battery @ 25°C | ≤10.2mΩ |
| Ambient Temperature | Discharge | -30°C~60°C |
| | Charge | -30°C~60°C |
| | Storage | -30°C~60°C |
| Max. Discharge Current @ 25°C | | 480A(5s) |
| Capacity affected by Temperature (10 hr Capacity) | 40°C | 108% |
| | 25°C | 100% |
| | 0°C | 90% |
| | -15°C | 70% |
| Self-Discharge@ 25°C per Month | | 3% |
| Charge (Constant Voltage) @25° C | Standby Use | Initial Charging Current Less than 10.8A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 10.8A Voltage 14.4-14.9V |

BATTERY DISCHARGE TABLE

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

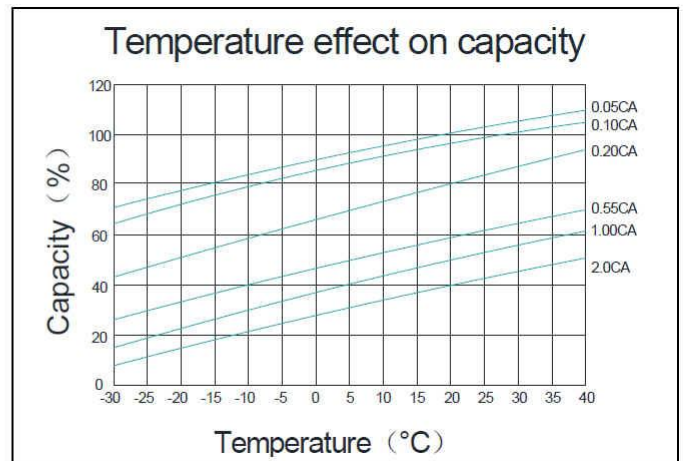
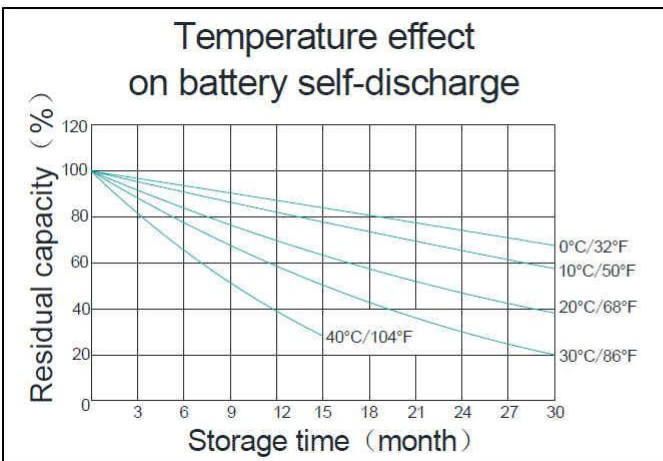
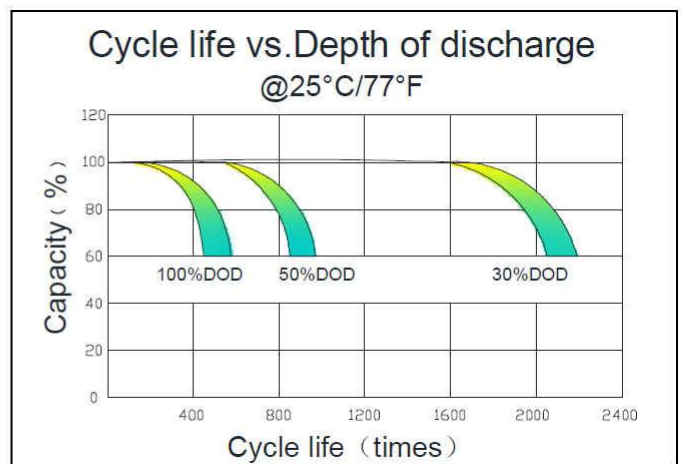
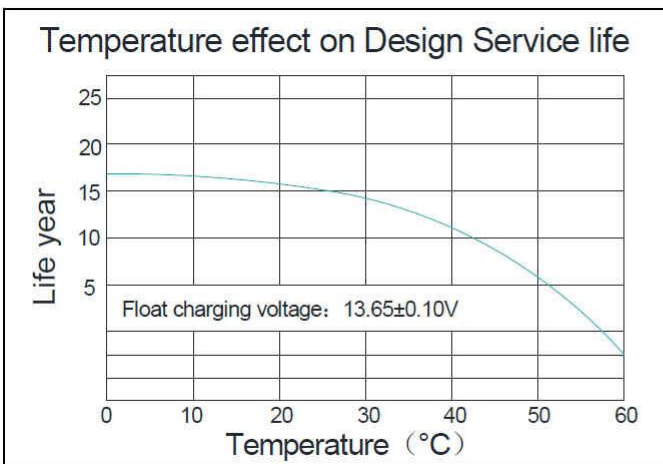
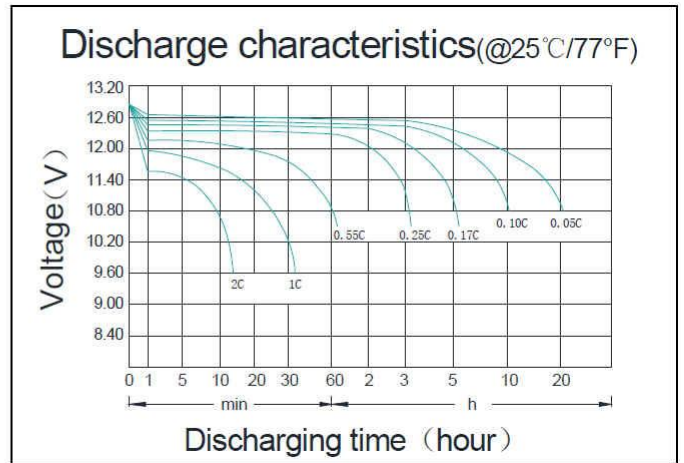
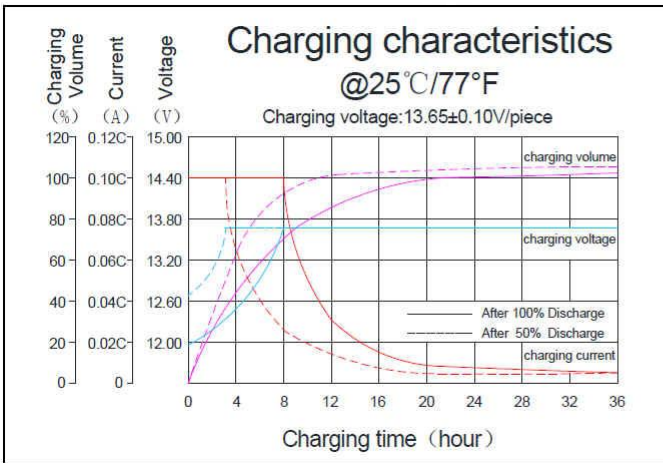
| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|----------|-------|-------|-------|------|------|------|-----|-----|------|------|------|
| 1.60V | 61.8 | 39.5 | 29.0 | 26.7 | 16.9 | 11.9 | 8.1 | 5.3 | 4.75 | 2.54 | 0.58 |
| 1.67V | 60.7 | 38.7 | 28.5 | 26.2 | 16.6 | 11.7 | 7.9 | 5.2 | 4.66 | 2.50 | 0.57 |
| 1.70V | 59.5 | 38.0 | 27.9 | 25.7 | 16.3 | 11.5 | 7.8 | 5.1 | 4.56 | 2.45 | 0.55 |
| 1.75V | 58.4 | 37.3 | 27.4 | 25.2 | 16.0 | 11.2 | 7.6 | 5.0 | 4.51 | 2.40 | 0.54 |
| 1.80V | 56.2 | 35.9 | 26.4 | 24.2 | 15.4 | 10.8 | 7.3 | 4.8 | 4.37 | 2.38 | 0.53 |

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

| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|----------|-------|-------|-------|------|------|------|------|------|-----|-----|------|
| 1.60V | 118.9 | 75.9 | 55.8 | 51.2 | 32.5 | 22.8 | 15.6 | 10.2 | 9.2 | 5.0 | 1.11 |
| 1.67V | 116.7 | 74.5 | 54.8 | 50.3 | 32.0 | 22.5 | 15.3 | 10.1 | 9.0 | 4.9 | 1.08 |
| 1.70V | 114.6 | 73.2 | 53.8 | 49.3 | 31.4 | 22.0 | 15.0 | 9.9 | 8.8 | 4.8 | 1.07 |
| 1.75V | 112.4 | 71.8 | 52.8 | 48.4 | 30.8 | 21.6 | 14.7 | 9.7 | 8.6 | 4.8 | 1.05 |
| 1.80V | 108.1 | 69.0 | 50.7 | 46.6 | 29.6 | 20.8 | 14.2 | 9.3 | 8.3 | 4.6 | 1.03 |

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 resistance | Female Copper Insert M6(torque:4~6N.m) | Advanced AGM separator for high pressure cell design | Diluted high purity sulfuric acid with fumed Silica gel | Two layers epoxy resin seal |

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