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|--|---|
| Capacity (25°C) | 20HR (1.93A, 10.5V) = 38.6AH 10HR (3.64A, 10.5V) = 36.4AH 5HR (6.43A, 10.5V) = 32.15AH 1HR (22.6A, 10.5V) = 22.6AH |
| Operating Temperature Range | Charge = -15°C to +50°C Discharge = -20°C to +60°C Storage = -20°C to +60°C |
| Approx. Weight | 10.7kg |
| Internal Resistance | Fully charged at 25°C : $\leq 8\text{m}\Omega$ |
| Self Discharge | 2% per month at (25°C) |
| Capacity Affected by Temp. (20HR) | 40°C = 102% 25°C = 100% 0°C = 85% -15°C = 65% |
| Charge Voltage (25°C) | Cycle Use = 14.4-14.7V (-30mV/°C) Max Current = 10.8A Float Use = 13.5-13.8V (-20mV/°C) |
| Dimensions (Nominal) | Length: 197mm (7.76 in.) Width: 131mm (5.16 in.) Height: 159mm (6.26 in.) Total Height: 180mm (7.09 in.) |



- Completely sealed, maintenance-free, low self-discharge
- State of the art AGM and grid alloy formula technology
- Non-spillable, stable quality and high reliability with excellent re-charging performance
- Floating and standby use up to: 6 years
- Cycle use: Up to 260 cycles at 100% DoD
- Cycle use: Up to 500 Cycles at 50% DoD
- Container and Cover Material – ABS UL94-HB (optional UL94-V0)
- Transportation - D.O.T., I.A.T.A. & F.A.A.

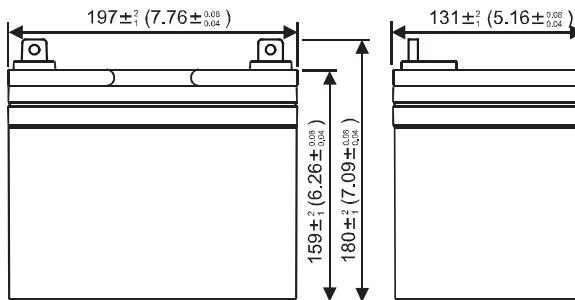
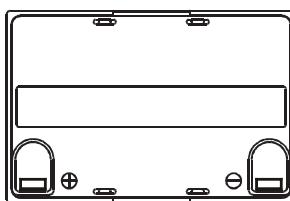


■ APPLICATIONS

Multipurpose
Telecommunications
UPS
Medical Equipment

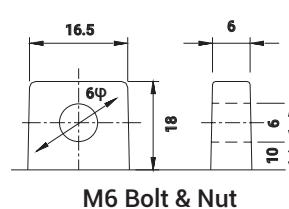
Alarm & Security System
Comm. Power Supply
Elec. Power System (EPS)
Emergency Backup Power

DC Power Supply
Auto Control System
Traffic Control Signaling
Emergency Lighting

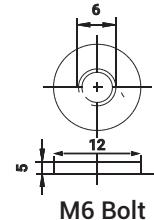


Terminal Type

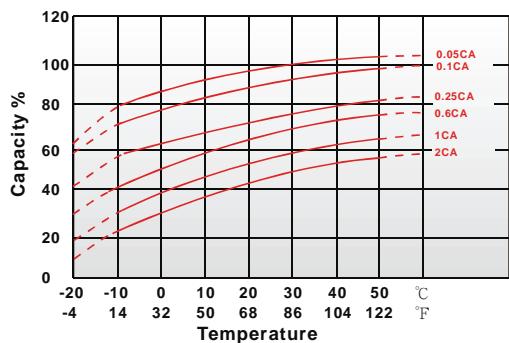
■ Terminal NB



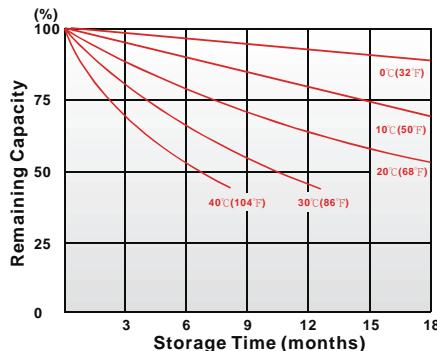
■ Terminal M



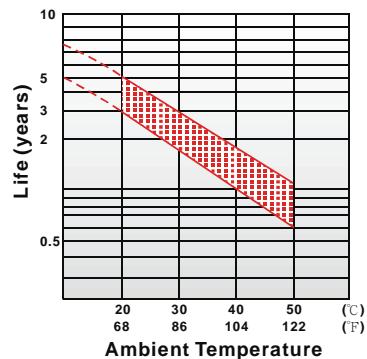
Effect of Temperature on Capacity 25°C (77°F)



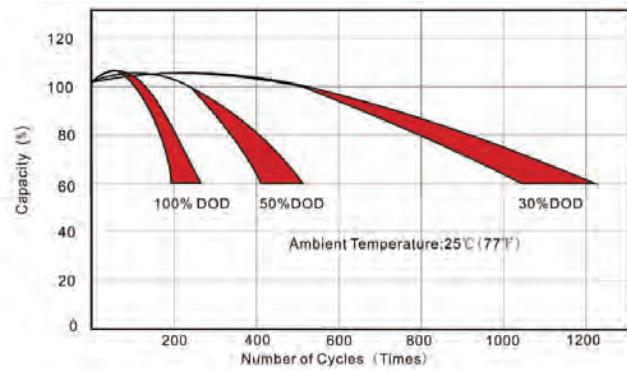
Capacity Retention Characteristic



Trickle (or Float) Service Life



Cycle Service Life



Regular Charge / Float Charge / Storage

- Charging voltage temperature compensation needs to be applied when temperature is below 0°C and above +45°C.
- Charging in temperatures below 0°C, the charge current should not exceed 0.1C as the core battery temperature can increase rapidly and damage the battery.
- During floating charge or when in storage, the life of the battery is cut in half for every 8°C temperature rise over 25°C.

Discharge

- Discharging at elevated temperatures improves performance of the battery yet shortens its life due to accelerated aging.
- Low temperature affects the battery internal resistance and lowers its capacity. The battery provides 100% specified capacity at 25°C. It will deliver 50% of its stated capacity at -20°C with 0.1C discharge current and 20% with 2C discharge current.

Constant Current Discharge (A) at 25°C (77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 10h | 20h |
|------------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.85V/cell | 93.30 | 69.00 | 60.80 | 37.30 | 20.60 | 11.70 | 8.89 | 7.38 | 6.27 | 3.52 | 1.81 |
| 1.80V/cell | 104.00 | 74.30 | 63.70 | 38.90 | 21.70 | 12.30 | 9.21 | 7.52 | 6.38 | 3.59 | 1.88 |
| 1.75V/cell | 115.00 | 79.40 | 64.90 | 39.80 | 22.60 | 12.80 | 9.42 | 7.59 | 6.43 | 3.64 | 1.93 |
| 1.70V/cell | 124.00 | 84.20 | 66.00 | 40.60 | 23.40 | 13.20 | 9.61 | 7.64 | 6.48 | 3.68 | 1.96 |
| 1.67V/cell | 128.00 | 86.70 | 66.40 | 41.10 | 23.70 | 13.30 | 9.68 | 7.66 | 6.50 | 3.69 | 1.97 |
| 1.60V/cell | 139.00 | 93.90 | 67.60 | 42.10 | 24.50 | 13.70 | 9.83 | 7.73 | 6.55 | 3.73 | 1.99 |

Constant Power Discharge (W) at 25°C (77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 10h | 20h |
|------------|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|------|
| 1.85V/cell | 175.00 | 134.00 | 117.00 | 73.70 | 44.20 | 24.30 | 18.50 | 15.00 | 12.30 | 7.12 | 3.63 |
| 1.80V/cell | 188.00 | 142.00 | 123.00 | 76.20 | 45.70 | 25.50 | 19.30 | 15.30 | 12.50 | 7.25 | 3.75 |
| 1.75V/cell | 203.00 | 150.00 | 127.00 | 77.70 | 46.70 | 26.30 | 20.00 | 15.50 | 12.70 | 7.37 | 3.83 |
| 1.70V/cell | 215.00 | 158.00 | 131.00 | 79.00 | 47.50 | 27.00 | 20.50 | 15.70 | 12.90 | 7.48 | 3.92 |
| 1.67V/cell | 221.00 | 163.00 | 133.00 | 79.70 | 47.80 | 27.20 | 20.70 | 15.80 | 13.00 | 7.60 | 3.95 |
| 1.60V/cell | 235.00 | 174.00 | 139.00 | 81.80 | 48.70 | 27.80 | 21.00 | 16.00 | 13.10 | 7.75 | 4.03 |