

Valve Regulated Lead-Acid Rechargeable Battery

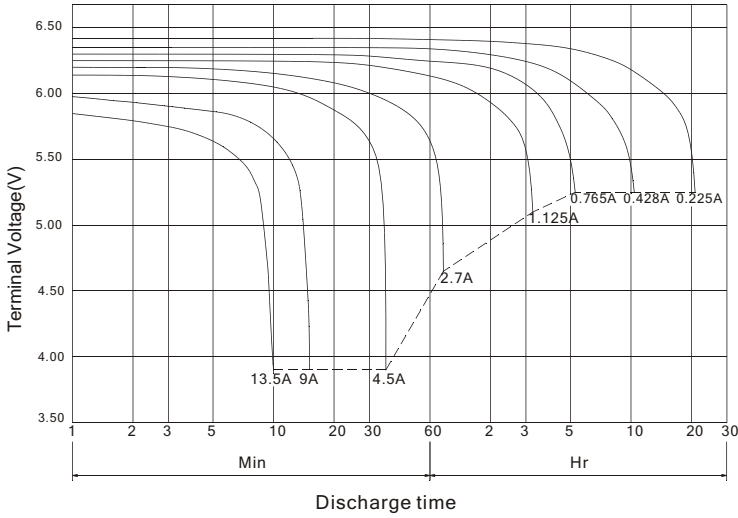
LA-6V4.5

The battery is constructed by plates, separators, safety valves and container. Since the electrolyte is held by a glass-mat separator and plates, the battery can be used in any direction and position without leakage.

PERFORMANCE SPECIFICATIONS

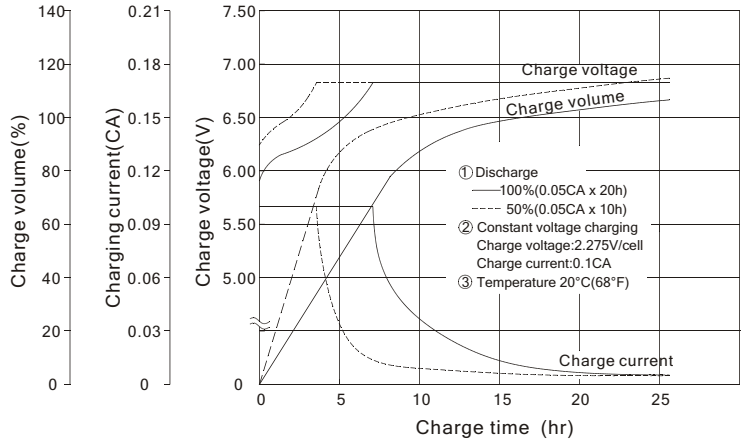
| | |
|---|--|
| Nominal Voltage(V)..... | 6 volts(3cells in series) |
| Nominal Capacity(AH) | |
| 20 hour rate F.V.(1.75V/cell) (225mA to 5.25volts) | 4.5A.H. |
| 10 hour rate F.V.(1.75V/cell) (428mA to 5.25volts) | 4.28A.H. |
| 5 hour rate F.V.(1.75V/cell) (765mA to 5.25volts) | 3.83A.H. |
| 1 hour rate F.V.(1.55V/cell) (2700mA to 4.65volts)..... | 2.7A.H. |
| Approximate Weight..... | 910g(2.00lbs.) |
| Terminal | |
| Standard..... | Type T1 |
| Optional..... | Type T2 |
| Internal Resistance (Fully Charged Battery)..... | <21m Ω |
| Maximum Discharge Current For 5 sec.(A)..... | 67.5A |
| Maximum Charge Current(A)..... | 1.35A |
| Ambient Temperature | |
| Charge..... | 0°C(32°F)~40°C(104°F) |
| Discharge..... | -20°C(-4°F)~50°C(122°F) |
| Storage..... | -20°C(-4°F)~40°C(104°F) |
| Vibration test: | |
| Frequency: 16.7HZ | |
| Amplitude: 4mm | |
| Vibrate the battery horizontally or vertically for 60 minutes. The battery have no abnormality. | |
| Case..... | ABS |
| Dimension(mm/inch) | |
| Length \pm 1.5mm..... | 70/2.76 |
| Width \pm 1.5mm..... | 48/1.89 |
| Container Height \pm 1.5mm..... | 102/4.02 |
| Total Height \pm 2mm..... | 107/4.21 |
| Application..... | Electronic Toy-Cars.Emergency Lights, Rechargeable Flashlights, UPS, Fans. |

Battery discharge characteristics (25°C/77°F)



Battery Charging Characteristics

(Typical example of the charge characteristic for the standby use)

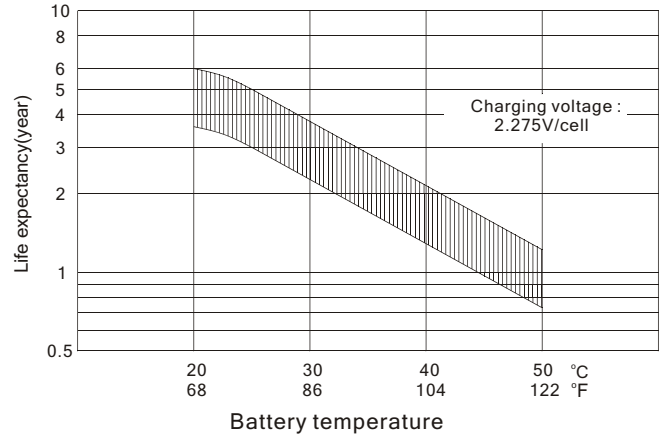


Charging Procedure

| Application | Charging method | Charging Voltage at 20°C (V/cell) | Temperature compensation coefficient of charging voltage (mV/°C/cell) | Max. charging current (CA) | Charging time 0.1CA, 20°C (h) | | Temp (°C) |
|--------------------------|---|-----------------------------------|---|----------------------------|-------------------------------|---------------|-----------------|
| | | | | | 100% discharge | 50% discharge | |
| For standby power Source | Constant voltage & Constant current charging (with current restriction) | 2.25~2.30 | -3 | 0.3 | 24 | 20 | 0~40 (32~104°F) |
| For cycle service | | 2.40~2.50 | -4 | 0.3 | 16 | 10 | |

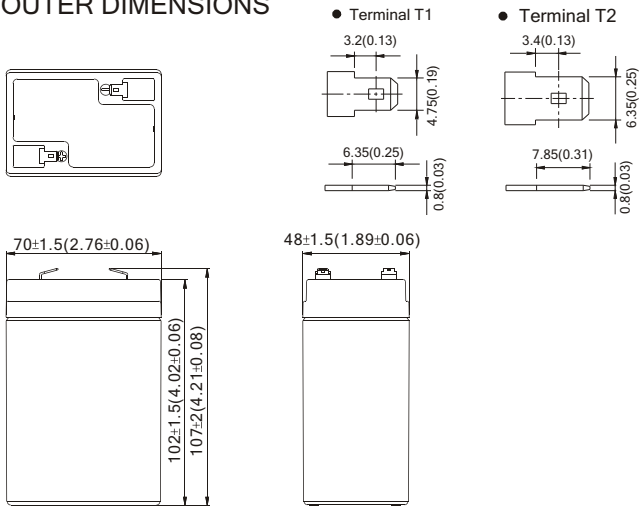
*Temperature compensation of charging voltage is not needed, when using the batteries within 5°C to 35°C range.

Effect of Temperature on Long Term Float Life



TERMINAL TYPE mm (inch)

OUTER DIMENSIONS



Constant power discharge characteristics at 25°C/77°F

| Final Voltage | Discharge time | | | | | | | | |
|---------------|----------------|-------|-------|-------|-------|------|------|------|------|
| | 5Min | 10Min | 15Min | 30Min | 1Hr | 3Hr | 5Hr | 10Hr | 20Hr |
| 5.40V | 81.3 | 59.9 | 48.0 | 28.6 | 16.38 | 6.56 | 4.52 | 2.53 | 1.32 |
| 5.25V | 94.2 | 64.9 | 50.2 | 29.6 | 16.87 | 6.69 | 4.59 | 2.56 | 1.35 |
| 5.10V | 100.0 | 67.2 | 51.8 | 30.3 | 17.17 | 6.75 | 4.62 | 2.58 | 1.36 |
| 4.95V | 104.5 | 68.8 | 52.9 | 30.7 | 17.38 | 6.80 | 4.63 | 2.59 | 1.36 |
| 4.80V | 108.0 | 70.2 | 54.0 | 31.1 | 17.55 | 6.84 | 4.65 | 2.59 | 1.36 |

TERMINAL POSITION

