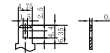
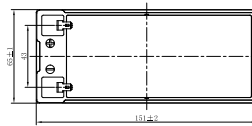
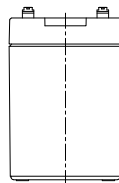
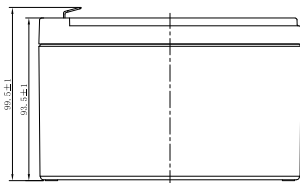


## Specification

|                                    |  |
|------------------------------------|--|
| Cells Per Unit                     | 6  |
| Voltage Per Unit                   | 12   |
| Capacity                           | 7.0Ah@20hr-rate to 1.75V per cell @25°C  |
| Weight                             | Approx. 1.97 Kg (Tolerance ±3.0%)  |
| Internal Resistance                | Approx. 33 mΩ  |
| Terminal                           | T1   |
| Max. Discharge Current             | 97.5A (5 sec)  |
| Design Life                        | 5 years (floating charge)  |
| Max. Charging Current              | 1.95 A   |
| Reference Capacity                 | C3 5.31AH<br>C5 5.95AH<br>C10 6.53AH<br>C20 7.00AH   |
| Float Charging Voltage             | 13.5 V~13.8V @ 25 °C<br>Temperature Compensation: -3mV/°C/Cell   |
| Cycle Use Voltage                  | 14.4 V~15.0 V @ 25°C<br>Temperature Compensation: -5mV/°C/Cell   |
| Operating Temperature Range        | Discharge: -15°C~50°C<br>Charge: -20°C~40°C<br>Storage: -15°C~40°C   |
| Normal Operating Temperature Range | 25°C ±5°C  |
| Self Discharge                     | AMP-Tech Plus (VRLA) batteries can be stored for up to 6 months at 25°C then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C. Please charged batteries before using. |
| Container Material                 | A.B.S. UL94-HB, UL94-V0 Optional.  |



## Dimensions



T1 Terminal

|              |                        |
|--------------|------------------------|
| Length       | 151±2mm (5.94 inches)  |
| Width        | 65±2mm (2.56 inches)   |
| Height       | 93.5±2mm (3.68 inches) |
| Total Height | 99.5±2mm (3.92 inches) |
| Terminal     | Value                  |
| M5           | 6~7 N*m                |
| M6           | 8~10 N*m               |
| M8           | 10~12 N*m              |

Unit: mm

### Constant Current Discharge Characteristics : A(25°C)

| F. V/Time  | 5MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 1HR  | 1.5HR | 2HR  | 3HR  | 4HR  | 5HR  | 6HR   | 8HR   | 10HR  | 20HR  |
|------------|------|-------|-------|-------|-------|-------|------|-------|------|------|------|------|-------|-------|-------|-------|
| 1.85V/cell | 17.0 | 12.5  | 9.90  | 8.10  | 6.12  | 4.64  | 3.91 | 2.90  | 2.38 | 1.72 | 1.36 | 1.16 | 0.990 | 0.780 | 0.637 | 0.343 |
| 1.80V/cell | 18.5 | 13.2  | 10.3  | 8.35  | 6.28  | 4.73  | 3.99 | 2.95  | 2.41 | 1.74 | 1.38 | 1.18 | 1.01  | 0.790 | 0.644 | 0.347 |
| 1.75V/cell | 19.9 | 13.8  | 10.7  | 8.60  | 6.43  | 4.83  | 4.06 | 3.00  | 2.45 | 1.77 | 1.40 | 1.19 | 1.02  | 0.800 | 0.653 | 0.350 |
| 1.70V/cell | 21.4 | 14.4  | 11.1  | 8.86  | 6.57  | 4.92  | 4.13 | 3.05  | 2.49 | 1.79 | 1.42 | 1.21 | 1.03  | 0.809 | 0.660 | 0.354 |
| 1.67V/cell | 22.3 | 14.8  | 11.3  | 9.01  | 6.67  | 4.98  | 4.17 | 3.08  | 2.51 | 1.81 | 1.43 | 1.22 | 1.04  | 0.816 | 0.665 | 0.356 |
| 1.60V/cell | 24.3 | 15.7  | 11.8  | 9.40  | 6.87  | 5.11  | 4.27 | 3.14  | 2.56 | 1.84 | 1.46 | 1.24 | 1.06  | 0.829 | 0.675 | 0.361 |

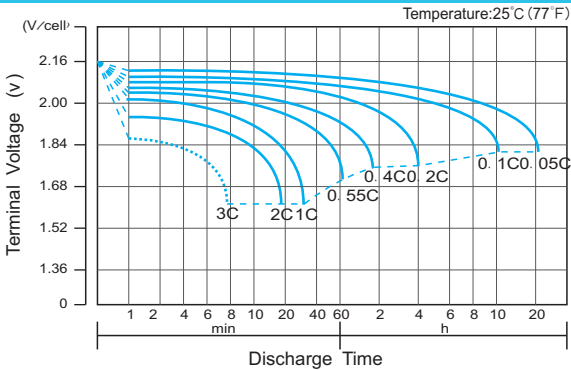
### Constant Power Discharge Characteristics : WPC(25°C)

| F. V/Time  | 5MIN | 10MIN | 15MIN | 20MIN | 30MIN | 45MIN | 1HR  | 1.5HR | 2HR  | 3HR  | 4HR  | 5HR  | 6HR  | 8HR   | 10HR | 20HR  |
|------------|------|-------|-------|-------|-------|-------|------|-------|------|------|------|------|------|-------|------|-------|
| 1.85V/cell | 32.3 | 23.9  | 19.1  | 15.6  | 11.8  | 9.01  | 7.61 | 5.67  | 4.65 | 3.37 | 2.69 | 2.29 | 1.96 | 1.550 | 1.27 | 0.686 |
| 1.80V/cell | 34.8 | 25.0  | 19.7  | 16.0  | 12.1  | 9.15  | 7.73 | 5.74  | 4.71 | 3.42 | 2.72 | 2.32 | 1.99 | 1.57  | 1.28 | 0.693 |
| 1.75V/cell | 37.4 | 26.1  | 20.3  | 16.4  | 12.3  | 9.30  | 7.84 | 5.82  | 4.77 | 3.46 | 2.76 | 2.35 | 2.01 | 1.58  | 1.29 | 0.700 |
| 1.70V/cell | 39.9 | 27.2  | 20.9  | 16.8  | 12.5  | 9.40  | 7.95 | 5.90  | 4.84 | 3.50 | 2.79 | 2.37 | 2.03 | 1.60  | 1.31 | 0.707 |
| 1.67V/cell | 41.4 | 27.8  | 21.3  | 17.1  | 12.7  | 9.50  | 8.02 | 5.95  | 4.87 | 3.53 | 2.81 | 2.39 | 2.05 | 1.61  | 1.32 | 0.712 |
| 1.60V/cell | 44.7 | 29.2  | 22.1  | 17.6  | 13.0  | 9.70  | 8.17 | 6.05  | 4.95 | 3.59 | 2.85 | 2.43 | 2.08 | 1.64  | 1.34 | 0.722 |

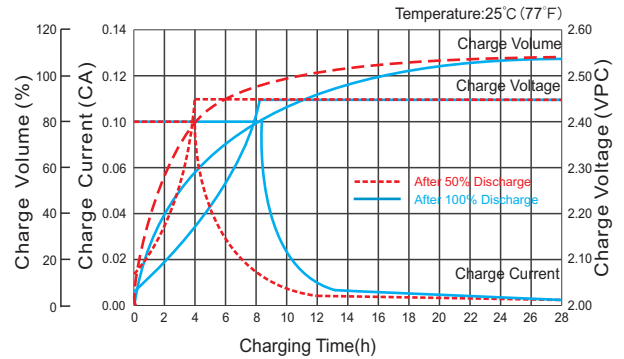
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

## VALVE REGULATED LEAD ACID AGM BATTERY

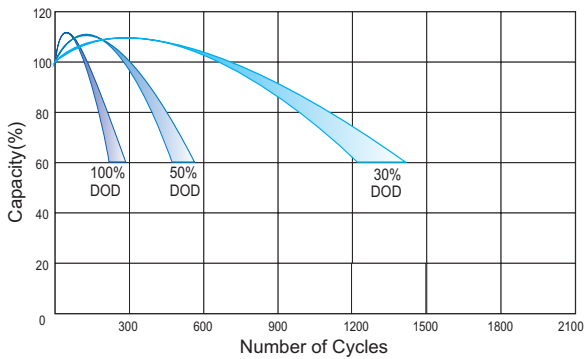
### Discharge Characteristics Curve



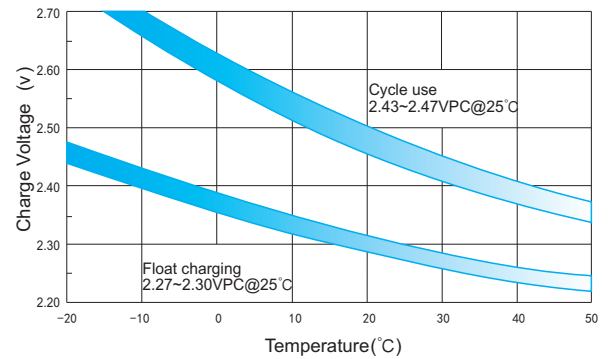
### Charge Characteristic Curve for Cycle Use (IU)



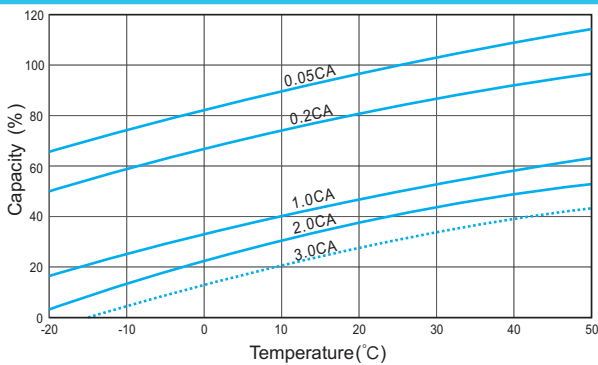
### Cycle Life in Relation to Depth of Discharge



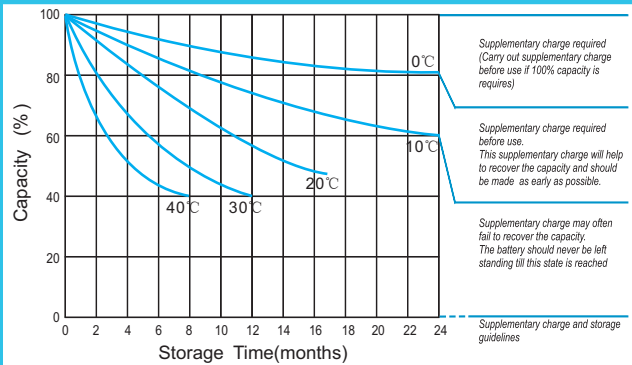
### Relationship Between Charging Voltage and Temperature



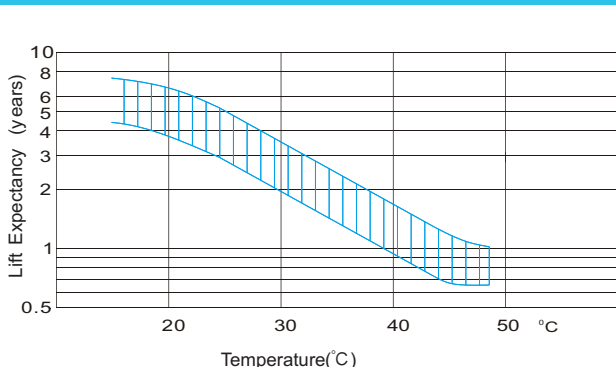
### Temperature Effects on Capacity



### Storage Characteristics



### Effect of Temperature on Long Term Life



### Relationship of OCV And State of Charge (20°C)

