# 41215 - 6FM18

- 100% before shipment testing, stable and reliable long-term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance-free, low self-discharge
- Excellent charging and re-charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating & standby use: 3-5 years

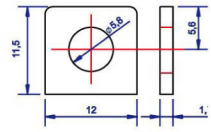
## Application:

- Alarm System
- Cable Television
- Communication Equipment
- Emergency Power System
- Security System
- Medical Equipment
- UPS
- Power tools
- Control Equipment
- Toys

ISO14001 ISO9001 TB09075935 MH 47104

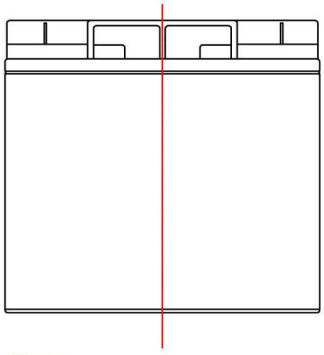
## Construction:

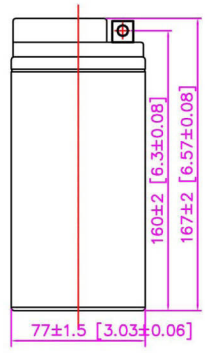
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper
- Separator .....Fiber glass
- Electrolyte .....Sulfuric acid

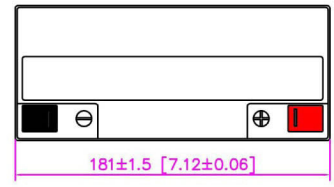



M5 Bolt &Nut

T1 Terminal



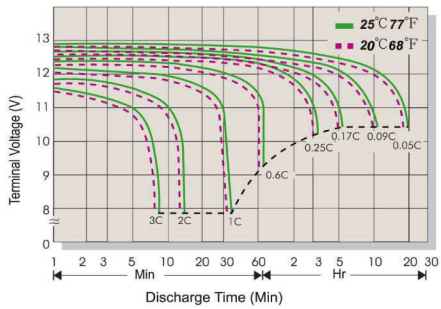


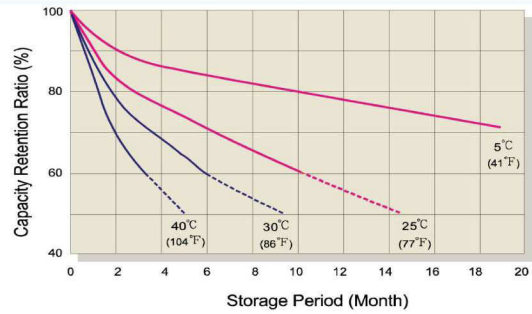

## Speification:

| Battery Model | 6FM18 12V18AH | | | |
|---|---|---|---|---|
| Designed Floating Life | 3～5 Years | | | |
| Capacity (25℃) | 20HR(0.90A,10.5V) | 10HR(1.73A,10.5V) | 5HR(3.24A,10.5V) | 1HR(10.85A,10.5V) |
| | 18.00AH | 17.30AH | 16.20AH | 10.85AH |
| Dimensions | Length | Width | Height | Total Height |
| | 181mm (7.12inch) | 77mm (3.03inch) | 160mm (6.30inch) | 167mm (6.57inch) |
| Approx. Weight | 5.6KG (11.68 lbs) ±5% | | | |
| Internal Resistance | Full charged at 25℃:≤12.0mΩ | | | |
| Self Discharge | 3% of capacity declined per month at (25℃) | | | |
| Capacity Affected by Temp.(20HR) | 40℃ | 25℃ | 0℃ | -15℃ |
| | 102% | 100% | 85% | 65% |
| Charge Voltage(25oC) | Cycle use | | Float use | |
| | 14.4-15.0V(-30mV/℃), max. Current: 5.4A | | 13.5-13.8V (-20mV/℃) | |

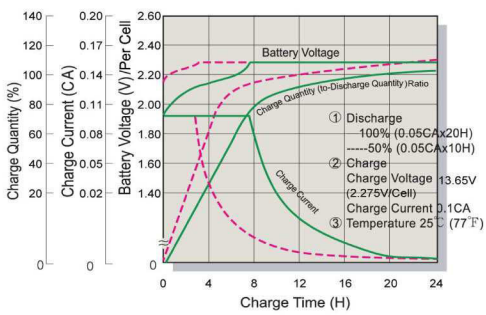
## Terminal Voltage (V) and Discharge Time



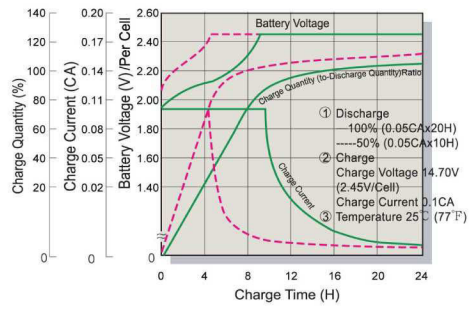

## Capacity Retention Characteristic



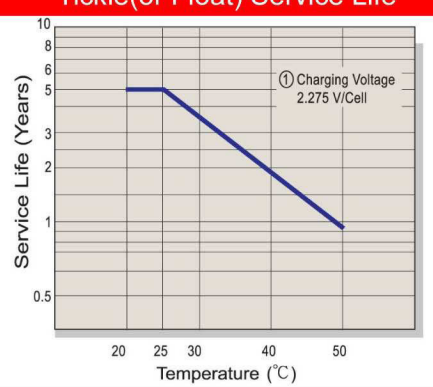

## Battery Vlotage and Charge Time for Standby Use



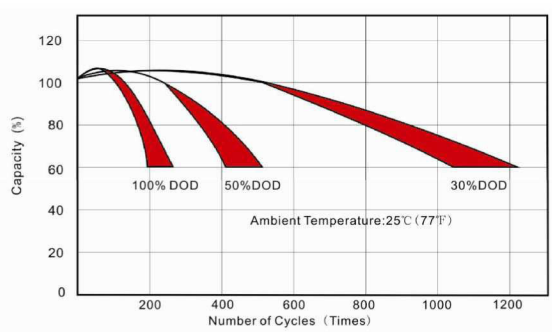

## Battery Vlotage and Charge Time for Cycle Use




## Tickle(or Float) Service Life




## Cycle Service Life




**Constant Current Discharge(CC,Unit:A) at 25℃(77℉)**

| F.V/Time | 5Min | 10Min | 15Min | 30Min | 1Hr | 2Hr | 3Hr | 4Hr | 5Hr | 6Hr | 10Hr | 20Hr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/Cell | 59.18 | 34.94 | 28.46 | 17.90 | 10.45 | 6.04 | 4.64 | 3.808 | 3.120 | 2.544 | 1.668 | 0.867 |
| 1.80V/Cell | 60.31 | 35.60 | 28.98 | 18.24 | 10.65 | 6.15 | 4.73 | 3.880 | 3.180 | 2.592 | 1.700 | 0.883 |
| 1.75V/Cell | 61.44 | 36.27 | 30.51 | 18.58 | 10.85 | 6.27 | 4.81 | 3.953 | 3.239 | 2.641 | 1.732 | 0.900 |
| 1.70V/Cell | 66.97 | 38.45 | 32.22 | 19.32 | 11.04 | 6.38 | 4.90 | 4.023 | 3.296 | 2.687 | 1.762 | 0.916 |
| 1.67V/Cell | 73.73 | 41.71 | 34.78 | 20.40 | 11.15 | 6.45 | 4.95 | 4.066 | 3.332 | 2.716 | 1.781 | 0.926 |
| 1.60V/Cell | 79.87 | 43.89 | 35.90 | 21.28 | 11.27 | 6.52 | 5.00 | 4.110 | 3.368 | 2.745 | 1.800 | 0.936 |

**Constant Power Discharge (CP,Unit:W) at 25℃(77℉)**

| F.V/Time | 5Min | 10Min | 15Min | 30Min | 1Hr | 2Hr | 3Hr | 4Hr | 5Hr | 6Hr | 10Hr | 20Hr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/Cell | 115.40 | 68.12 | 53.54 | 34.90 | 20.37 | 11.77 | 9.04 | 7.43 | 6.08 | 4.96 | 3.25 | 1.69 |
| 1.80V/Cell | 117.61 | 69.43 | 54.57 | 35.57 | 20.76 | 12.00 | 9.21 | 7.57 | 6.20 | 5.05 | 3.31 | 1.72 |
| 1.75V/Cell | 119.81 | 70.73 | 55.59 | 36.24 | 21.15 | 12.22 | 9.39 | 7.71 | 6.32 | 5.15 | 3.38 | 1.76 |
| 1.70V/Cell | 130.59 | 74.97 | 58.92 | 37.68 | 21.52 | 12.44 | 9.55 | 7.84 | 6.43 | 5.24 | 3.44 | 1.79 |
| 1.67V/Cell | 143.77 | 81.34 | 63.93 | 39.79 | 21.75 | 12.57 | 9.66 | 7.93 | 6.50 | 5.30 | 3.47 | 1.81 |
| 1.60V/Cell | 155.76 | 85.58 | 67.26 | 41.49 | 21.99 | 12.71 | 9.76 | 8.01 | 6.57 | 5.35 | 3.51 | 1.82 |