

### General Series Battery

FM series batteries are Maple Armor brand universal lead-acid batteries. Using high-quality lead calcium multi-element alloy plates, with high rate discharge capacity; High performance cast welded grid, with conductivity 30% higher than ordinary batteries; Internally, it adopts integrated casting and welding, reducing internal resistance by 20% and better adapting to high current discharge; Unique AGM technology enables higher energy density and stronger charging acceptance of batteries; Imported ABS raw materials and self-made shell, using self-developed automatic sealing technology, make the battery a complete whole, greatly improving sealing performance; Copper terminals (plug-in/vertical/downward rotation) not only meet the needs of high current charging and discharging, but also have flexible installation and more convenient maintenance. This series of batteries is manufactured using internationally advanced automated production lines, with high stability and consistency, and a longer service life. Design lifespan up to 10 years (25 °C)

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.
- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System

### General Features

- \* Heavy Duty Grid
- \* Mechanized assembly
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Long Life and low self-discharge design

### Construction

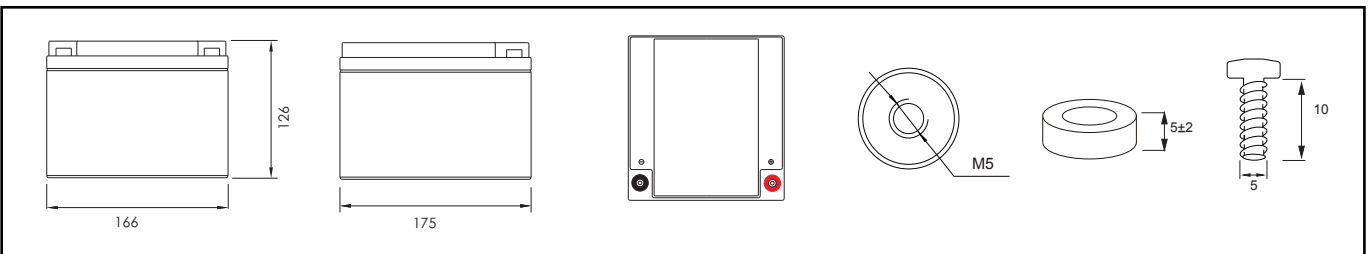
- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Sulfuric acid
- \* Separator ..... Fiber glass
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper
- \* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)



### Specification

|                                      |                                                      |                           |                           |                         |
|--------------------------------------|------------------------------------------------------|---------------------------|---------------------------|-------------------------|
| Battery Model                        | Nominal Voltage                                      |                           | 12V                       |                         |
|                                      | Rated capacity (20 Hour rate)                        |                           | 26Ah                      |                         |
|                                      | Cells Per battery                                    |                           | 6                         |                         |
| Dimension                            | Length                                               | Width                     | Height                    | Total Height            |
|                                      | 175mm (6.88 inches)                                  | 166mm (6.53 inches)       | 126mm (4.96 inches)       | 126mm (4.96 inches)     |
| Approx Weight                        | 7.40kg (16.31lbs) ± 3%                               |                           |                           |                         |
| Capacity @ 25°C<br>(77°F)            | 20 hour rate(1.34A,10.5V)                            | 10 hour rate(2.60A,10.5V) | 5 hour rate(4.449A,10.5V) | 1 hour rate(14.4A,9.6V) |
|                                      | 26.8Ah                                               | 26Ah                      | 22.245Ah                  | 14.4Ah                  |
| Max.discharge current                | 360A (5 Sec.)                                        |                           |                           |                         |
| Internal Resistance                  | Full charged at 25°C: Approx 13.5mΩ                  |                           |                           |                         |
| Capacity affected<br>by Temp.(20 HR) | 40°C (104°F)                                         | 25°C (77°F)               | 0°C (32°F)                | -15°C (5°F)             |
|                                      | 102%                                                 | 100%                      | 85%                       | 65%                     |
| Self Discharge<br>@25°C (77°F)       | After 3 months storage                               |                           | After 6 months storage    | After 12 months storage |
|                                      | 91%                                                  |                           | 82%                       | 64%                     |
| Charge method<br>@25°C (77°F)        | Cycle Use                                            |                           | Float Use                 |                         |
|                                      | 14.4-15.0V (Initial charging current less than 7.8A) |                           | 13.50-13.80V              |                         |

### Outer dimension (mm)

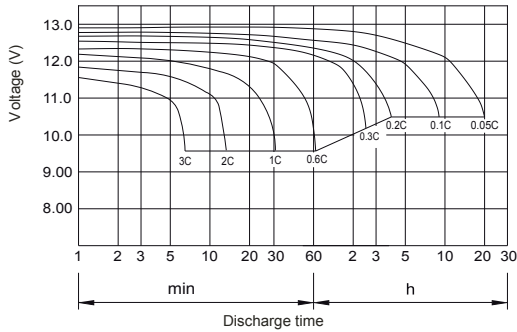
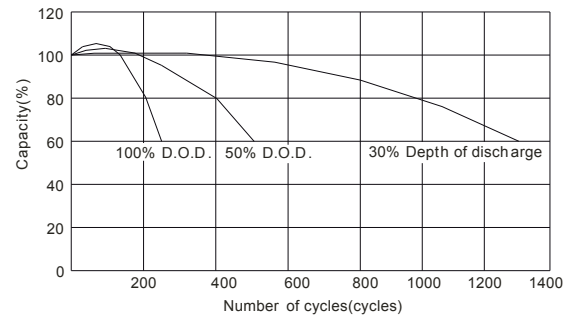
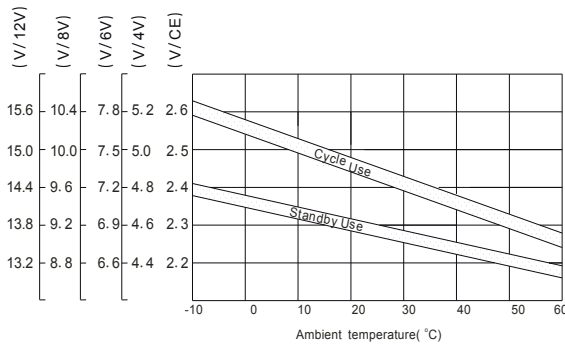
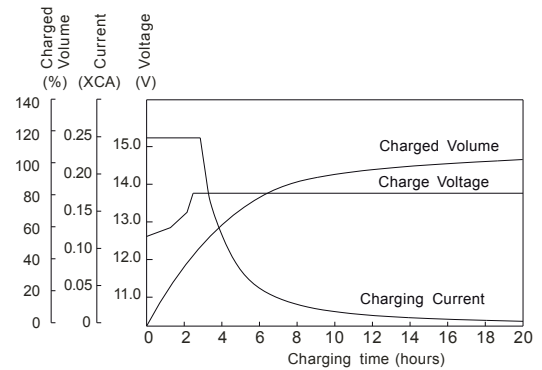
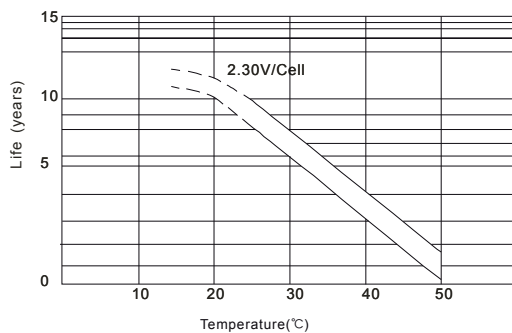
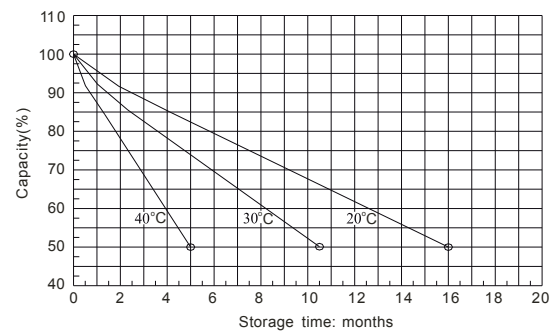
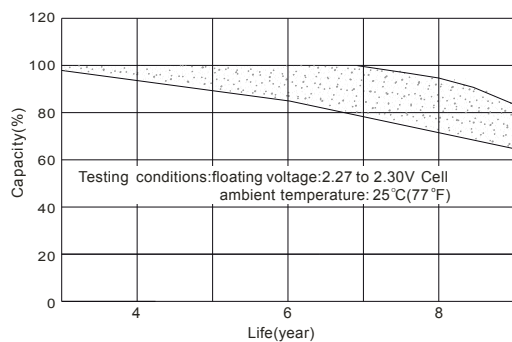


### Terminal Type (mm)

**Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)**

| F.V/time | 5MIN    | 10MIN   | 15MIN  | 30MIN  | 60MIN  | 90MIN  | 2HR    | 3HR    | 5HR   | 8HR   | 10HR  | 20HR  |
|----------|---------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1.60V    | 91.000  | 58.436  | 44.200 | 26.000 | 14.400 | 10.539 | 9.254  | 6.592  | 4.499 | 3.313 | 2.698 | 1.473 |
|          | 168.308 | 111.552 | 85.306 | 51.792 | 28.728 | 21.043 | 18.517 | 13.190 | 9.001 | 6.629 | 5.398 | 2.946 |
| 1.67V    | 80.788  | 54.532  | 41.904 | 25.444 | 14.296 | 10.435 | 9.208  | 6.558  | 4.474 | 3.285 | 2.656 | 1.399 |
|          | 149.397 | 104.090 | 80.938 | 50.711 | 28.522 | 20.840 | 18.440 | 13.144 | 8.968 | 6.586 | 5.325 | 2.805 |
| 1.70V    | 76.476  | 52.581  | 40.871 | 25.222 | 14.191 | 10.424 | 9.185  | 6.541  | 4.473 | 3.252 | 2.622 | 1.362 |
|          | 141.455 | 100.429 | 79.003 | 50.269 | 28.348 | 20.828 | 18.401 | 13.115 | 8.968 | 6.524 | 5.261 | 2.731 |
| 1.75V    | 69.214  | 49.481  | 39.149 | 24.778 | 13.983 | 10.289 | 9.128  | 6.500  | 4.449 | 3.243 | 2.600 | 1.340 |
|          | 128.028 | 94.530  | 75.752 | 49.420 | 28.000 | 20.577 | 18.283 | 13.039 | 8.925 | 6.510 | 5.220 | 2.690 |
| 1.80V    | 61.839  | 46.152  | 37.541 | 24.222 | 13.878 | 10.216 | 9.070  | 6.465  | 4.437 | 3.215 | 2.558 | 1.296 |
|          | 114.412 | 88.202  | 72.755 | 48.333 | 27.826 | 20.482 | 18.171 | 12.976 | 8.905 | 6.459 | 5.139 | 2.603 |
| 1.85V    | 54.464  | 42.822  | 35.590 | 23.556 | 13.670 | 10.101 | 8.989  | 6.408  | 4.412 | 3.173 | 2.516 | 1.252 |
|          | 100.796 | 81.874  | 69.044 | 47.037 | 27.448 | 20.303 | 18.017 | 12.873 | 8.864 | 6.381 | 5.060 | 2.517 |

Note: The above datas are average values. (Edition 2024-05)

**Discharge characteristic Curve**

**Cycle service life in relation to depth of discharge**

**Relationship between charging voltage and temperature**

**Constant voltage charging characteristic (0.25CA, at 25°C)**

**Temperature effects on float life**

**Self-discharge characteristic**

**Life characteristics of standby use**

**Charge characteristic Curve for standby use**
