

6-GFM Series

6-GFM-80



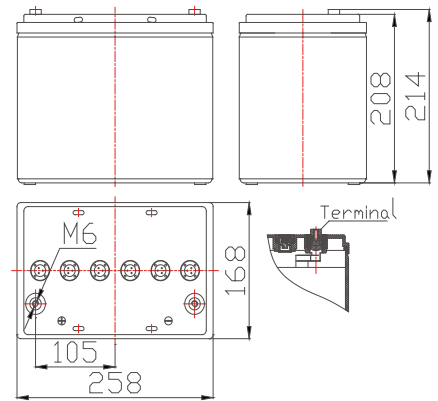
Main Applications

- ▶ Backup power for telecom and signal system
- ▶ Military field, railway system, power system
- ▶ UPS & emergency lighting system
- ▶ Fire alarm and security system

Benefits

- ▶ 10 years design life
- ▶ Safely and reliably sealed
- ▶ High energy density, low internal resistance and low discharge rate
- ▶ Excellent charging acceptability and high sealed reaction efficiency

Dimensions :



Technical Parameters

| | |
|------------------------------------|---|
| Normal Voltage | 12V |
| Capacity | 80Ah @ 10hr to 1.80V per cell @ 25 °C (77 °F) |
| Weight | Approx. 23.5kg (51.7lbs) |
| Dimensions | Length: 258mm Width: 168mm Height: 208mm Total Height: 214mm |
| Internal Resistance (full charged) | Approx. 5.1mΩ@ 25 °C (77 °F) |
| Maximum Discharge Current | 496A (5sec) |
| Self Discharge @ 25 °C (77 °F) | Less than 8 % after 90 days storage |
| Operating Temperature Range | Discharge: -40 °C ~ 50 °C (-40 °F ~ 122 °F) Charge: -20 °C ~ 45 °C (-4 °F ~ 113 °F) Storage: -20 °C ~ 40 °C (4 °F ~ 104 °F) |
| Recommended Operating Temperature | 15 °C ~ 25 °C (59 °F ~ 77 °F) |
| Maximum Charging Current Limited | 16A |
| Charging Voltage @25°C(77°F) | Float: 2.25 V/cell, Temps coefficient -3 mV/ °C Cycle: 2.35 V/cell |
| Terminal | M6 |
| Container Materials | ABS/ABS V0 (Optional) |
| Capacity Affected by Temperature | 105 % @ 40 °C 85 % @ 0 °C 60 % @ -20 °C |
| Design Life @25°C(77°F) | 10 years |

Attain Certificate :

- ISO9001
- ISO14001
- ISO18001
- UL
- CE

Technical Features

- ▶ Adopt high strength ABS plastic, compact structure for battery container and valve, good impact resistance, and shock resistant performance
- ▶ Adopt multi-element alloy grids, low internal resistance, good corrosion resistance ability and charging acceptability.
- ▶ New production process for plate, improve the utilization of active material
- ▶ High-purity electrolyte and special additives(ZL02112896.0),low self-discharge
- ▶ Multi-layer seal technology and special seal glue, no leakage and no acid mist escape, safe and reliable

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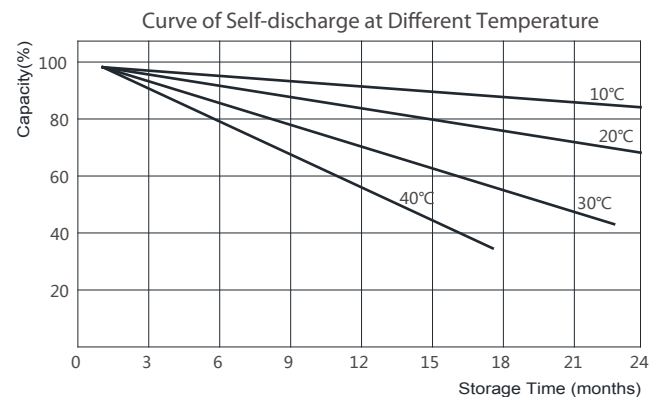
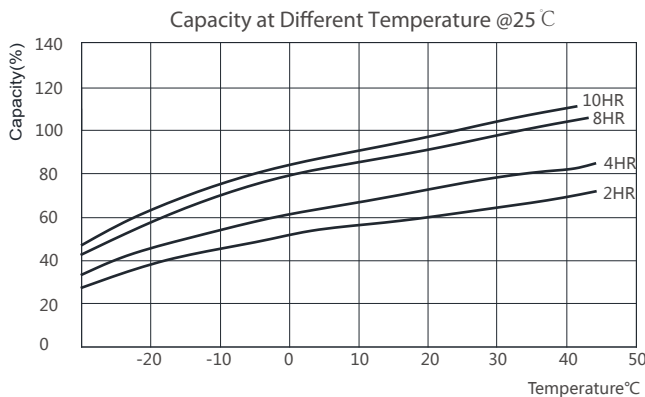
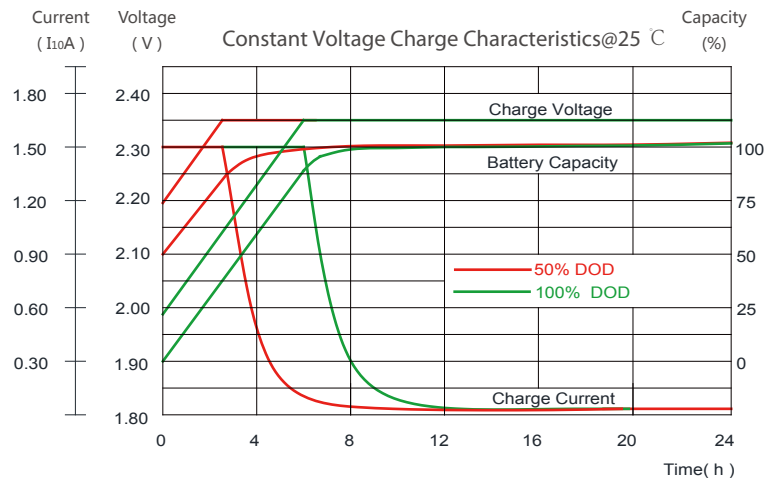
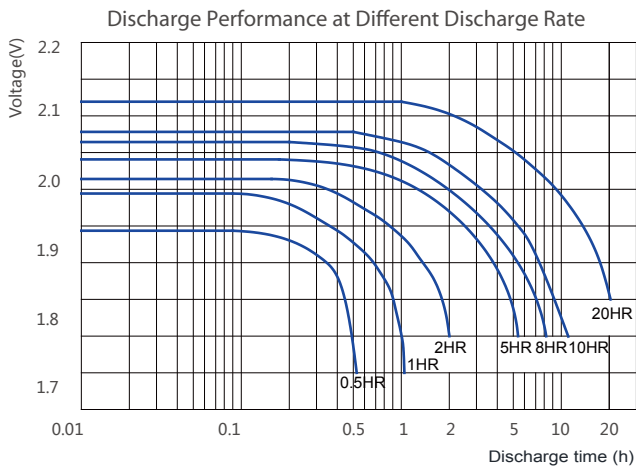
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

| F.V/Time | 15min | 30min | 1hr | 2hr | 3hr | 4hr | 5hr | 6hr | 8hr | 10hr |
|------------|-------|-------|------|------|------|------|------|------|------|------|
| 1.90V/cell | 76.6 | 59.5 | 37.9 | 26.9 | 19.5 | 15.6 | 13.3 | 11.7 | 9.2 | 7.8 |
| 1.85V/cell | 92.6 | 67.5 | 40.2 | 28.5 | 19.8 | 15.8 | 13.4 | 12.2 | 9.4 | 7.9 |
| 1.80V/cell | 107.8 | 73.2 | 43.2 | 29.1 | 20.0 | 16.0 | 13.6 | 12.4 | 9.7 | 8.0 |
| 1.75V/cell | 116.2 | 77.4 | 44.1 | 29.4 | 20.3 | 16.2 | 13.8 | 12.5 | 9.9 | 8.1 |
| 1.70V/cell | 122.6 | 81.8 | 45.6 | 29.8 | 20.8 | 16.6 | 14.1 | 12.6 | 10.0 | 8.3 |
| 1.65V/cell | 128.1 | 84.8 | 47.0 | 30.6 | 21.0 | 16.8 | 14.3 | 12.7 | 10.1 | 8.4 |

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

| F.V/Time | 15min | 30min | 1hr | 2hr | 3hr | 4hr | 5hr | 6hr | 8hr | 10hr |
|------------|-------|-------|------|------|------|------|------|------|------|------|
| 1.90V/cell | 147.1 | 115.1 | 74.5 | 53.4 | 42.1 | 33.1 | 28.5 | 23.7 | 18.6 | 15.9 |
| 1.85V/cell | 174.2 | 128.7 | 77.6 | 55.8 | 43.0 | 33.3 | 28.7 | 24.6 | 18.8 | 15.9 |
| 1.80V/cell | 199.6 | 136.0 | 82.3 | 56.5 | 43.4 | 33.8 | 28.8 | 24.8 | 19.4 | 16.0 |
| 1.75V/cell | 211.7 | 142.2 | 83.2 | 56.8 | 43.7 | 34.1 | 29.0 | 25.0 | 19.8 | 16.2 |
| 1.70V/cell | 217.7 | 148.4 | 84.7 | 57.1 | 44.1 | 34.3 | 29.3 | 25.2 | 20.0 | 16.6 |
| 1.65V/cell | 220.8 | 151.8 | 86.2 | 58.2 | 44.9 | 34.4 | 29.8 | 25.4 | 20.2 | 16.8 |

Performance Curve:



Declaration: This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

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