

LFP1250AL(12V50Ah)

Specifications

| | | |
|--|--------------|--|
| Nominal Voltage | | 12 V |
| Capacity (25°C) | 10HR(10.8V) | 50Ah |
| | 5HR(10.5V) | 43.7Ah |
| | 1HR(9.60V) | 31Ah |
| Dimension | Length | 258±2mm (10.16inch) |
| | Width | 133±2mm (5.24inch) |
| | Height | 200±2mm (7.87inch) |
| | Total Height | 200±2mm (7.87inch) |
| Approx. Weight | | 16.5kg (36.4lbs)±4% |
| Terminal type | | T9 |
| Internal resistance (Fully charged, 25°C) | | Approx. 7.5mΩ |
| Capacity affected by temperature (10HR) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-discharge (25°C) | 3 month | Remaining Capacity: 91% |
| | 6 month | Remaining Capacity: 82% |
| | 12 month | Remaining Capacity: 65% |
| Nominal operating temperature | | 25°C ± 3°C (77°F ± 5°F) |
| Operating temperature range | Discharge | -15°C ~ 50°C (5°F ~ 122°F) |
| | Charge | -10°C ~ 50°C (14°F ~ 122°F) |
| | Storage | -20°C ~ 50°C (-4°F ~ 122°F) |
| Float charging voltage(25°C) | | 13.50 to 13.80V Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.50 to 14.90V Temperature compensation: -30mV/°C |
| Maximum charging current | | 15A |
| Terminal material | | Copper |
| Maximum discharge current | | 500A(5 sec.) |
| Designed floating life(20°C) | | 15years |

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

Constant Current Discharge Characteristics (A, 25°C)

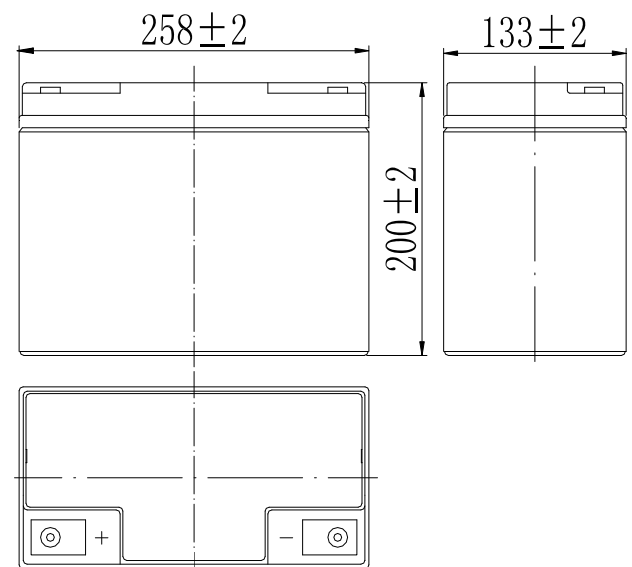
| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 102 | 80.9 | 49.0 | 31.0 | 18.3 | 12.8 | 10.5 | 8.93 | 6.12 | 5.09 | 2.67 |
| 9.90V | 98.8 | 78.9 | 48.0 | 30.5 | 18.2 | 12.7 | 10.4 | 8.87 | 6.08 | 5.08 | 2.67 |
| 10.2V | 94.7 | 76.0 | 46.6 | 29.8 | 18.0 | 12.6 | 10.3 | 8.81 | 6.04 | 5.07 | 2.66 |
| 10.5V | 90.6 | 73.4 | 45.4 | 29.2 | 17.7 | 12.5 | 10.3 | 8.75 | 6.00 | 5.04 | 2.64 |
| 10.8V | 85.6 | 69.5 | 43.8 | 28.3 | 17.3 | 12.1 | 9.94 | 8.49 | 5.82 | 5.00 | 2.63 |

Constant Power Discharge Characteristics (Watt, 25°C)

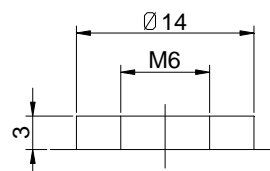
| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|------|------|------|
| 9.60V | 1100 | 888 | 550 | 353 | 212 | 150 | 123 | 105 | 72.7 | 60.8 | 32.1 |
| 9.90V | 1067 | 866 | 539 | 348 | 210 | 149 | 122 | 105 | 72.3 | 60.7 | 32.0 |
| 10.2V | 1023 | 834 | 522 | 339 | 208 | 148 | 121 | 104 | 71.8 | 60.5 | 31.9 |
| 10.5V | 979 | 806 | 510 | 333 | 205 | 147 | 121 | 103 | 71.3 | 60.1 | 31.7 |
| 10.8V | 924 | 763 | 491 | 322 | 200 | 143 | 117 | 100 | 69.1 | 59.7 | 31.5 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

Dimensions



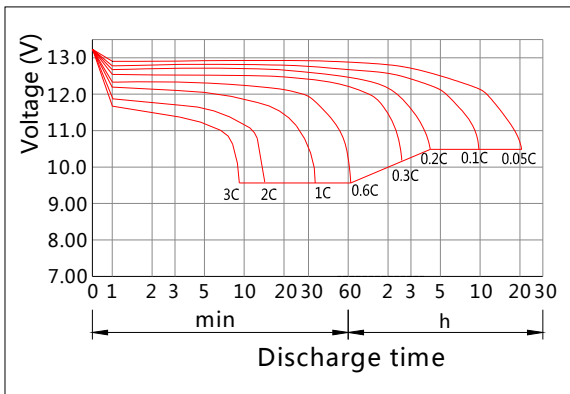
Terminal



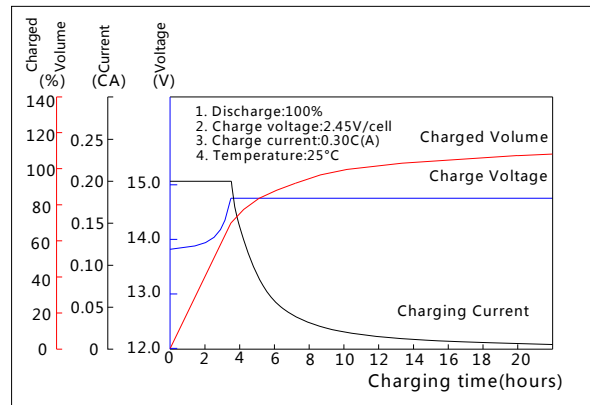
Terminal T9

LFP1250AL(12V50Ah)

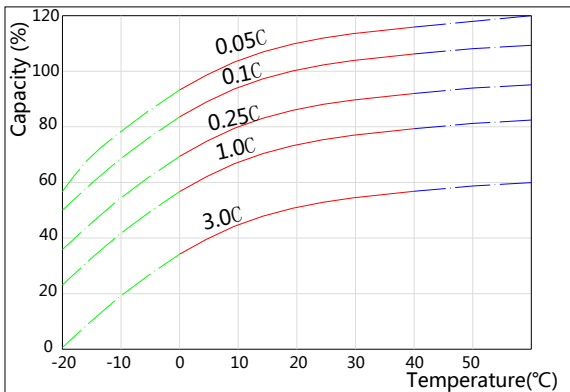
Discharge Characteristics(25°C)



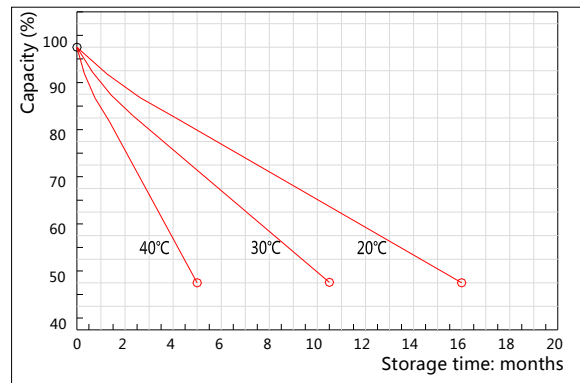
Charging Characteristics(25°C)



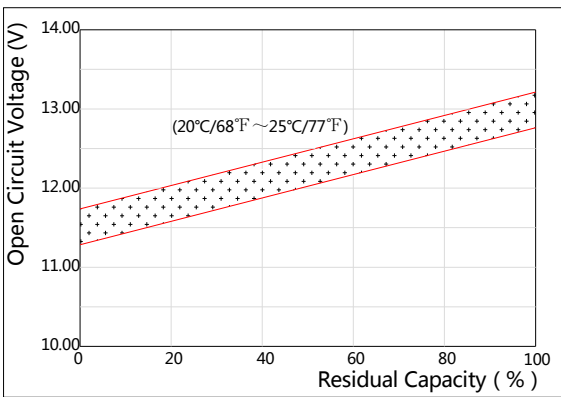
Effect of Temperature on Capacity



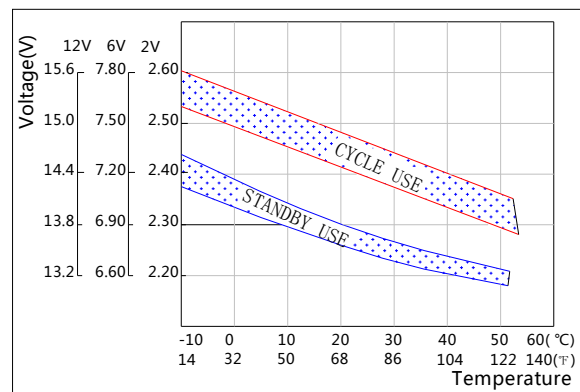
Self-discharge Characteristics



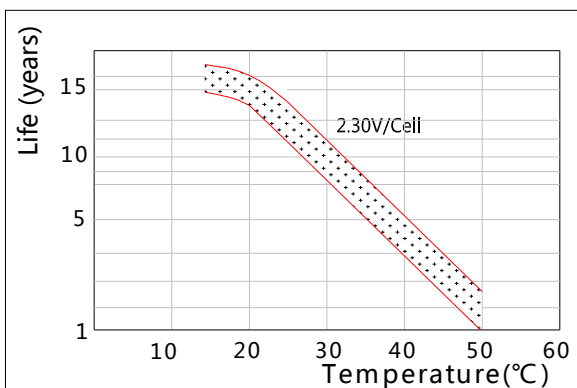
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

