

Specification

| | | |
|----------------------------------|---|--------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity(20HR) | 55.0Ah | |
| Dimensions | Length | 229 ± 2mm |
| | Width | 138 ± 2mm |
| | Container Height | 211 ± 2mm |
| | Total Height (with Terminal) | 214 ± 2mm |
| Approx Weight | Approx 16.5 kg | |
| Terminal | T6 | |
| Container Material | ABS | |
| Rated Capacity | 55.00 Ah/2.75A | (20hr, 1.80V/cell, 25°C) |
| | 51.00 Ah/5.10A | (10hr, 1.75V/cell, 25°C) |
| | 41.80 Ah/8.36A | (5hr, 1.75V/cell, 25°C) |
| | 37.22 Ah/12.74A | (3hr, 1.70V/cell, 25°C) |
| | 29.73Ah/29.73A | (1hr, 1.65V/cell, 25°C) |
| Max. Discharge Current | 500A (5s) | |
| Internal Resistance | Approx 7.0mΩ | |
| Operating Temp. Range | Discharge | -15 ~ 50°C |
| | Charge | 0 ~ 40°C |
| | Storage | -15 ~ 40°C |
| Nominal Operating Temp. Range | 25 ± 3° C | |
| Cycle Use | Initial Charging Current less than 16.5A. Voltage | |
| | 14.4V~15.0V at 25°C Temp. Coefficient -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage | |
| | 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 40°C | 103% |
| | 25°C | 100% |
| | 0°C | 86% |
| Self Discharge | PBC series batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. | |
| | For higher temperatures the time interval will be shorter. | |



Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



Constant Current Discharge (Amperes) at 25 °C (77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1.85V/cell | 108.4 | 83.41 | 64.80 | 41.35 | 24.48 | 14.65 | 11.12 | 8.97 | 7.68 | 5.31 | 4.90 | 2.67 |
| 1.80V/cell | 127.5 | 96.40 | 73.76 | 45.20 | 26.51 | 15.74 | 11.86 | 9.50 | 8.08 | 5.56 | 5.00 | 2.75 |
| 1.75V/cell | 141.7 | 106.0 | 80.27 | 47.91 | 27.94 | 16.50 | 12.37 | 9.86 | 8.36 | 5.74 | 5.10 | 2.86 |
| 1.70V/cell | 152.3 | 113.1 | 85.09 | 49.89 | 28.97 | 17.04 | 12.74 | 10.13 | 8.56 | 5.86 | 5.20 | 2.92 |
| 1.65V/cell | 160.4 | 118.4 | 88.68 | 51.35 | 29.73 | 17.45 | 13.01 | 10.32 | 8.71 | 5.95 | 5.30 | 2.97 |
| 1.60V/cell | 166.5 | 122.5 | 91.42 | 52.45 | 30.31 | 17.75 | 13.21 | 10.46 | 8.82 | 6.02 | 5.40 | 3.03 |

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 201 | 155 | 122 | 79.0 | 47.2 | 28.5 | 21.7 | 17.5 | 15.1 | 10.5 | 9.02 | 4.66 |
| 1.80V/cell | 232 | 176 | 137 | 85.5 | 50.8 | 30.4 | 23.0 | 18.5 | 15.8 | 11.0 | 9.39 | 4.83 |
| 1.75V/cell | 254 | 190 | 147 | 89.7 | 53.2 | 31.7 | 23.9 | 19.2 | 16.3 | 11.3 | 9.64 | 4.94 |
| 1.70V/cell | 268 | 200 | 153 | 92.5 | 54.9 | 32.6 | 24.5 | 19.6 | 16.6 | 11.5 | 9.81 | 5.02 |
| 1.65V/cell | 279 | 207 | 158 | 94.7 | 56.2 | 33.3 | 25.0 | 19.9 | 16.9 | 11.7 | 9.94 | 5.08 |
| 1.60V/cell | 282 | 208 | 160 | 95.3 | 56.7 | 33.6 | 25.2 | 20.1 | 17.0 | 11.8 | 10.0 | 5.12 |

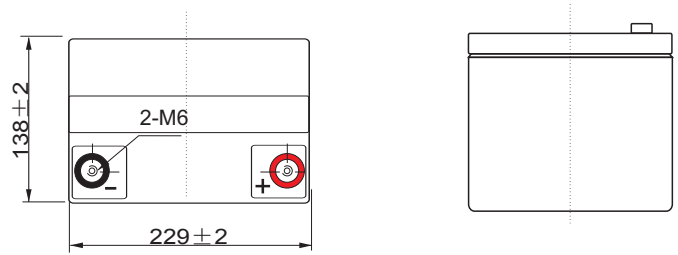
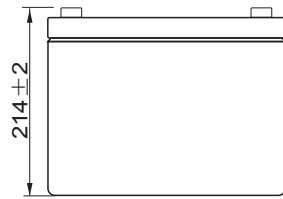
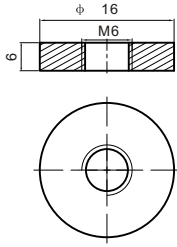
Specifications subject to change without notice.



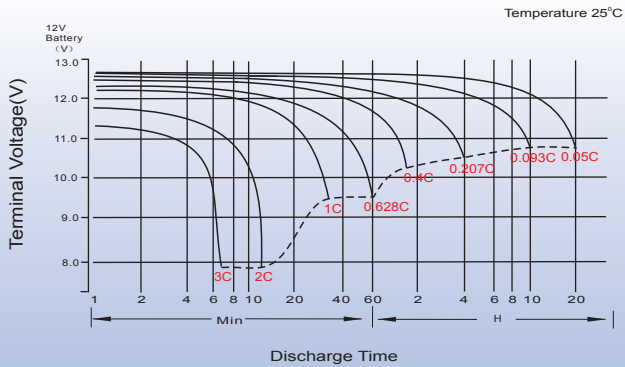
Dimensions

T6 Terminal

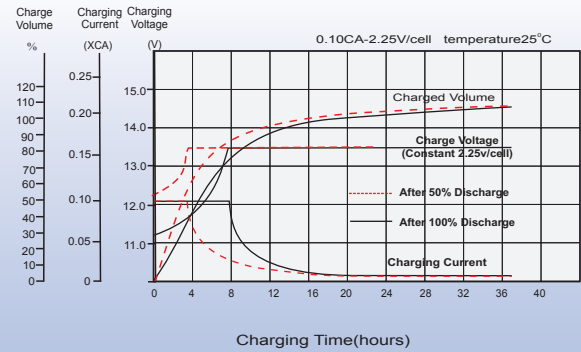
Unit: mm



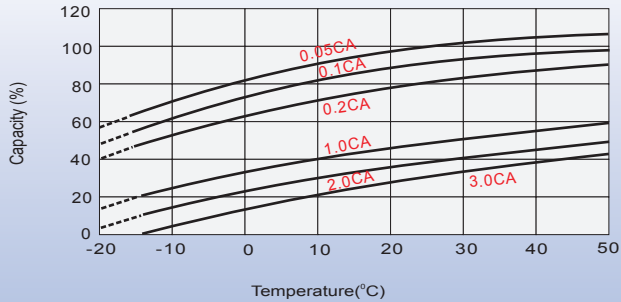
Discharge Characteristics



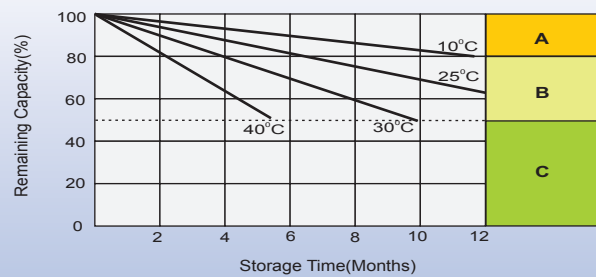
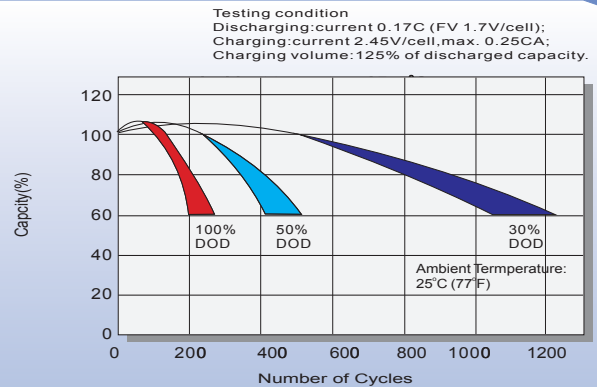
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Contact