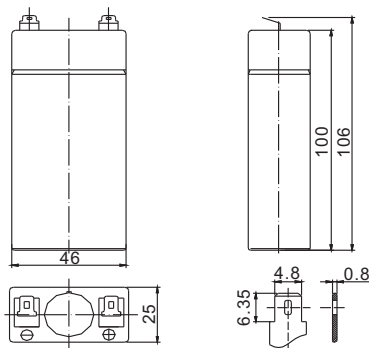


# Standard Series FP245 2V4.5Ah

**FirstPower®**

## Dimension(mm)



**T1**  
Terminal



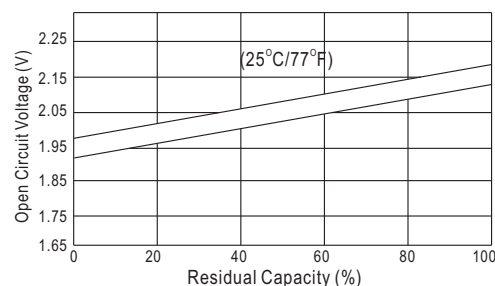
## Specification

|                      |              |                  |
|----------------------|--------------|------------------|
| Nominal Voltage      |              | 2 V              |
| Capacity(20HR, 25°C) |              | 4.5 Ah           |
| Dimension            | Length       | 46mm (1.81inch)  |
|                      | Width        | 25mm (0.98inch)  |
|                      | Height       | 100mm (3.94inch) |
|                      | Total Height | 106mm (4.17inch) |
| Approx. Weight       |              | 0.28kg (0.62lbs) |

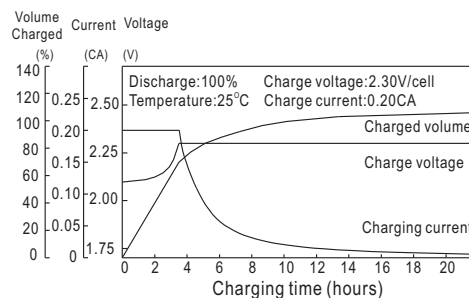
## Characteristics

|  |              |                         |
|--|--------------|-------------------------|
| Capacity 20°C<br>(68□) To<br>1.70V/Cell  | 20 hour rate | 4.5Ah                   |
|  | 10 hour rate | 4.3Ah                   |
|  | 5 hour rate  | 3.7Ah                   |
|  | 1 hour rate  | 2.88Ah                  |
|  | 15 min rate  | 2.07Ah                  |
| Internal resistance(Fully charged, 25°C) |              | Approx. 8.5m Ω          |
| Capacity affected by temperature (20HR)  | 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              |              | -15°C~50°C(5°F~122°F)   |
| Float charging voltage(25°C)             |              | 2.27 to 2.30V           |
| Cyclic charging voltage(25°C)            |              | 2.42 to 2.48V           |
| Maximum charging current                 |              | 1.35A                   |
| Terminal material                        |              | Copper                  |
| Maximum discharge current                |              | 68A(5 Sec.)             |

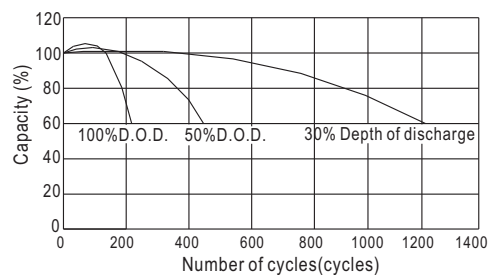
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



## Charging Characteristics(25°C)



## Cycle Life(25°C)



## Constant Current Discharge Characteristics (A, 25°C)

| F.V/TIME | 5min | 10min | 15min | 30min | 60min | 3h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60V    | 15.9 | 10.6  | 8.60  | 4.70  | 3.00  | 1.10 | 0.75 | 0.43 | 0.23 |
| 1.70V    | 15.1 | 10.1  | 8.26  | 4.51  | 2.88  | 1.08 | 0.74 | 0.43 | 0.23 |
| 1.80V    | 14.2 | 9.47  | 7.84  | 4.29  | 2.74  | 1.06 | 0.73 | 0.42 | 0.22 |

## Constant Power Discharge Characteristics (Watt, 25°C)

| 5min | 10min | 15min | 30min | 60min | 3h   | 5h   | 10h  | 20h  |
|------|-------|-------|-------|-------|------|------|------|------|
| 29.6 | 19.9  | 16.3  | 8.98  | 5.79  | 2.17 | 1.49 | 0.86 | 0.46 |
| 28.1 | 18.9  | 15.7  | 8.62  | 5.56  | 2.14 | 1.47 | 0.86 | 0.46 |
| 26.4 | 17.8  | 14.9  | 8.19  | 4.28  | 2.10 | 1.44 | 0.84 | 0.44 |