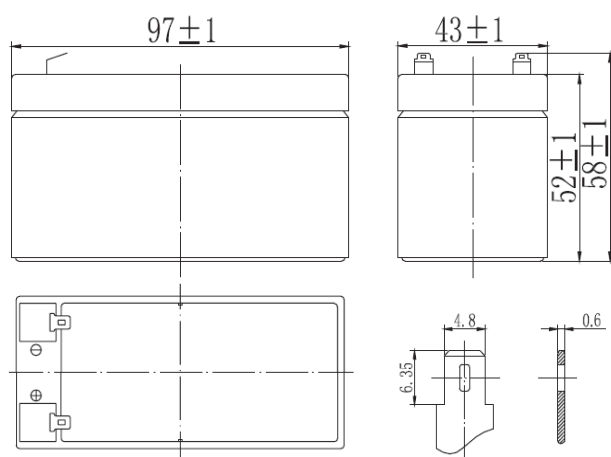


## APPLICATIONS

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system



## SPECIFICATIONS

|                                           |                              |               |
|-------------------------------------------|------------------------------|---------------|
| Nominal Voltage                           | 12 V                         |               |
| Number of cells                           | 6                            |               |
| Design Floating Life (20°C)               | 10 years                     |               |
| Dimensions                                | Length                       | 97 mm         |
|                                           | Width                        | 43 mm         |
|                                           | Height                       | 52 mm         |
|                                           | Total Height                 | 58 mm         |
| Weight                                    | 0.52 kg                      |               |
| Nominal Capacity (25°C)                   | 20 hours rate (1.75)         | 1.20 Ah       |
|                                           | 10 hours rate (1.75)         | 1.06 Ah       |
|                                           | 5 hours rate (1.75)          | 0.96 Ah       |
|                                           | 1 hour rate (1.60)           | 0.736 Ah      |
| Internal Resistance (fully charged, 25°C) | 90 mOhm                      |               |
| Self Discharge                            | approx. 3% per month at 25°C |               |
| Nominal Operating Temperature             | 25°C                         |               |
| Operating Temperature range               | Discharge                    | -15°C to 50°C |
|                                           | Charge                       | -10°C to 50°C |
|                                           | Storage                      | -20°C to 50°C |
| Float Charging Voltage                    | 2.25 to 2.30 V/cell at 25°C  |               |
| Temperature compensation                  | -18mV/°C                     |               |
| Maximum charging current                  | 0.36 A                       |               |
| Maximum discharge current (25°C)          | 18 A (5 sec.)                |               |
| Short Circuit Current (25°C)              | 130 A                        |               |

## PERFORMANCE DATA

### Discharge Constant Current at 25°C (Amperes)

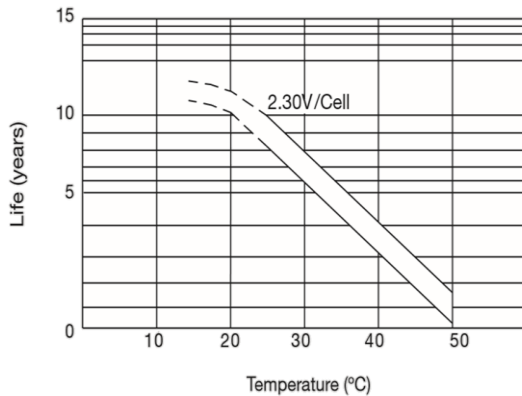
| End Voltage (V/cell) | 5min | 10min | 15min | 30min | 1h    | 2h    | 3h    | 4h    | 5h    | 10h   | 20h   |
|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V                | 4.3  | 2.7   | 2.14  | 1.20  | 0.736 | 0.406 | 0.290 | 0.226 | 0.196 | 0.107 | 0.061 |
| 1.65V                | 4.2  | 2.6   | 2.09  | 1.18  | 0.725 | 0.403 | 0.288 | 0.225 | 0.195 | 0.107 | 0.060 |
| 1.70V                | 4.0  | 2.5   | 2.01  | 1.14  | 0.706 | 0.400 | 0.286 | 0.224 | 0.193 | 0.106 | 0.060 |
| 1.75V                | 3.8  | 2.4   | 1.94  | 1.11  | 0.692 | 0.394 | 0.284 | 0.222 | 0.192 | 0.106 | 0.060 |
| 1.80V                | 3.6  | 2.3   | 1.84  | 1.07  | 0.671 | 0.384 | 0.276 | 0.215 | 0.186 | 0.103 | 0.056 |

### Discharge Constant Power at 25°C (Watts)

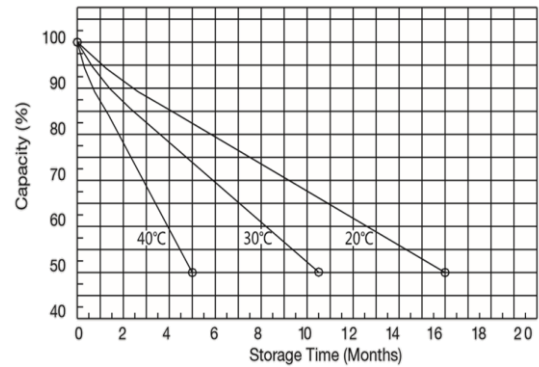
| End Voltage (V/cell) | 5min | 10min | 15min | 30min | 1h   | 2h   | 3h   | 4h   | 5h   | 10h  | 20h   |
|----------------------|------|-------|-------|-------|------|------|------|------|------|------|-------|
| 1.60V                | 48.0 | 30.6  | 24.4  | 13.8  | 8.52 | 4.75 | 3.45 | 2.70 | 2.34 | 1.29 | 0.729 |
| 1.65V                | 46.4 | 29.6  | 23.8  | 13.5  | 8.39 | 4.72 | 3.43 | 2.68 | 2.32 | 1.28 | 0.726 |
| 1.70V                | 44.5 | 28.4  | 22.9  | 13.1  | 8.18 | 4.68 | 3.40 | 2.66 | 2.31 | 1.27 | 0.721 |
| 1.75V                | 42.6 | 27.2  | 22.1  | 12.7  | 8.02 | 4.61 | 3.38 | 2.64 | 2.29 | 1.27 | 0.720 |
| 1.80V                | 39.7 | 25.6  | 21.0  | 12.3  | 7.77 | 4.49 | 3.28 | 2.56 | 2.22 | 1.24 | 0.677 |

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

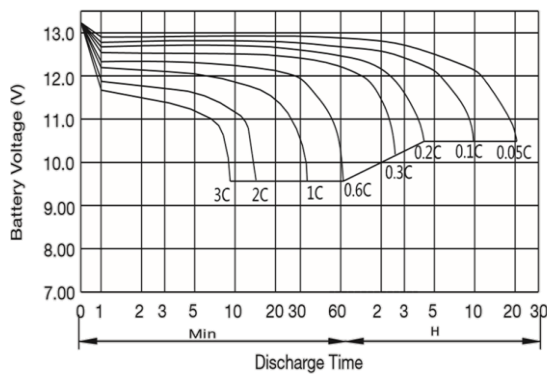
### Temperature Effects on Float Life



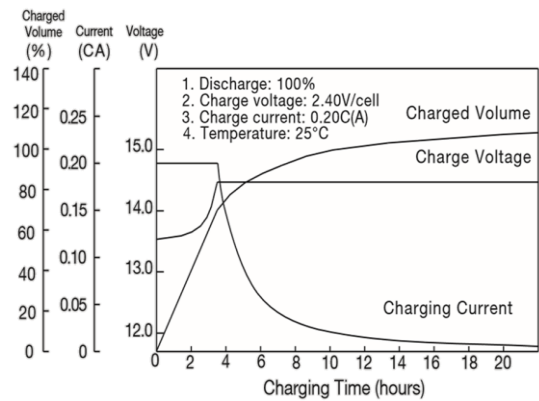
### Self Discharge Characteristics



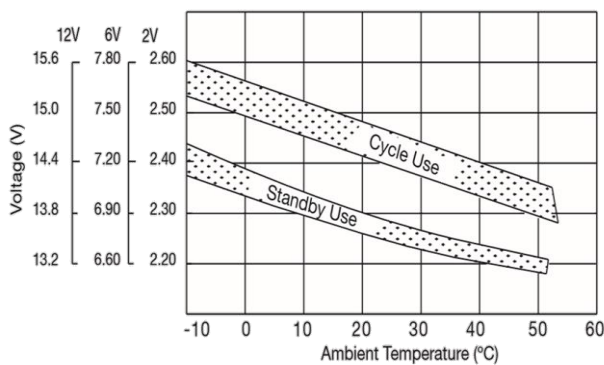
### Discharge Characteristics (25°C)



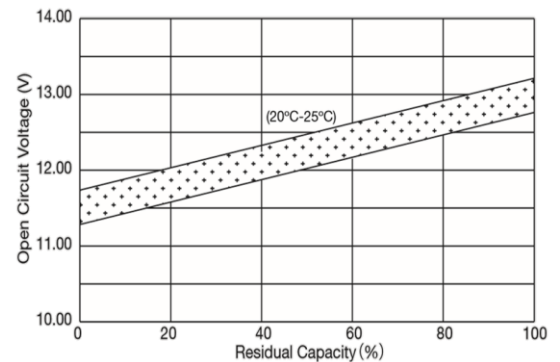
### Charging Characteristics (25°C)



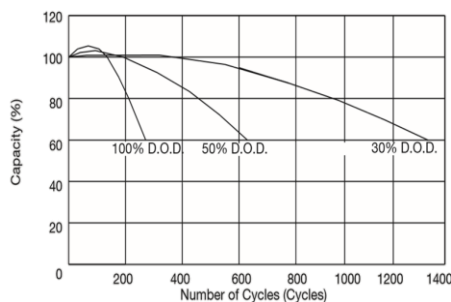
### Relationship Between Charging Voltage and Temperature



### Relationship Between OCV and Residual Capacity (25°C)



### Cycle Service Life in Relation to Depth of Discharge



### Temperature Effects on Capacity

