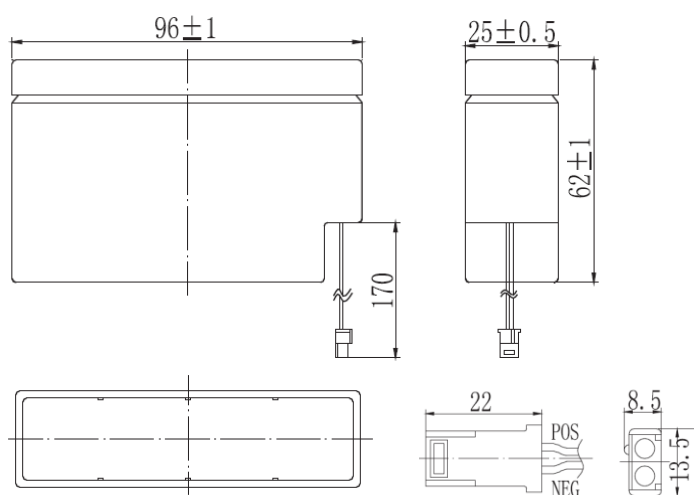


## APPLICATIONS

- 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                       | 96 mm         |
|                                           | Width                        | 25 mm         |
|                                           | Height                       | 62 mm         |
|                                           | Total Height                 | 62 mm         |
| Weight                                    | 0.33 kg                      |               |
| Nominal Capacity (25°C)                   | 20 hours rate (1.75)         | 0.80 Ah       |
|                                           | 10 hours rate (1.75)         | 0.74 Ah       |
|                                           | 5 hours rate (1.75)          | 0.68 Ah       |
|                                           | 1 hour rate (1.60)           | 0.52 Ah       |
| Internal Resistance (fully charged, 25°C) | 200 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                  | 0.24 A                       |               |
| Maximum discharge current (25°C)          | 5 A (5 sec.)                 |               |
| Short Circuit Current (25°C)              | 60 A                         |               |

## PERFORMANCE DATA

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

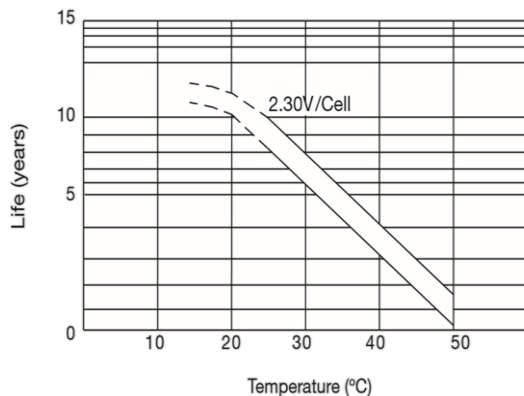
| End Voltage (V/cell) | 10min | 15min | 30min | 1h   | 2h    | 3h    | 4h    | 5h    | 8h    | 10h   | 20h   |
|----------------------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V                | 1.92  | 1.52  | 0.85  | 0.52 | 0.284 | 0.204 | 0.163 | 0.139 | 0.090 | 0.076 | 0.041 |
| 1.65V                | 1.86  | 1.48  | 0.83  | 0.51 | 0.283 | 0.203 | 0.162 | 0.138 | 0.089 | 0.075 | 0.040 |
| 1.70V                | 1.79  | 1.43  | 0.81  | 0.50 | 0.280 | 0.201 | 0.161 | 0.137 | 0.089 | 0.075 | 0.040 |
| 1.75V                | 1.71  | 1.38  | 0.79  | 0.49 | 0.276 | 0.200 | 0.160 | 0.136 | 0.088 | 0.074 | 0.040 |
| 1.80V                | 1.61  | 1.31  | 0.76  | 0.47 | 0.269 | 0.194 | 0.155 | 0.132 | 0.085 | 0.073 | 0.039 |

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

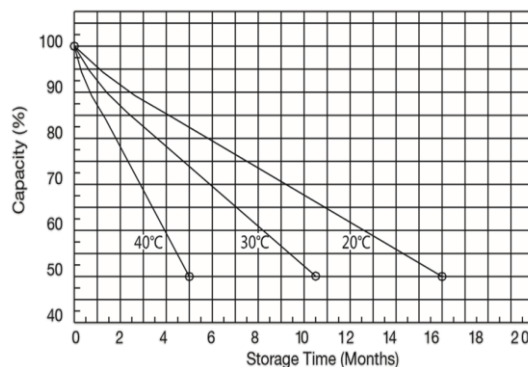
| End Voltage (V/cell) | 10min | 15min | 30min | 1h  | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------------------|-------|-------|-------|-----|------|------|------|------|------|------|------|
| 1.60V                | 21.7  | 17.3  | 9.7   | 6.0 | 3.33 | 2.42 | 1.94 | 1.66 | 1.08 | 0.91 | 0.49 |
| 1.65V                | 21.0  | 16.9  | 9.5   | 5.9 | 3.31 | 2.41 | 1.93 | 1.65 | 1.07 | 0.90 | 0.49 |
| 1.70V                | 20.1  | 16.3  | 9.2   | 5.8 | 3.28 | 2.39 | 1.92 | 1.64 | 1.06 | 0.90 | 0.48 |
| 1.75V                | 19.3  | 15.7  | 9.0   | 5.7 | 3.23 | 2.38 | 1.91 | 1.62 | 1.06 | 0.89 | 0.48 |
| 1.80V                | 18.2  | 14.9  | 8.7   | 5.5 | 3.14 | 2.30 | 1.85 | 1.58 | 1.02 | 0.87 | 0.47 |

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

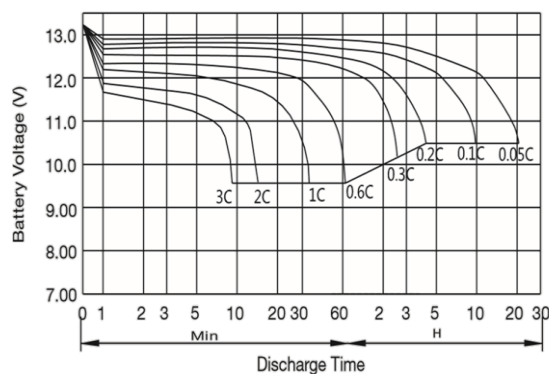
### Temperature Effects on Float Life



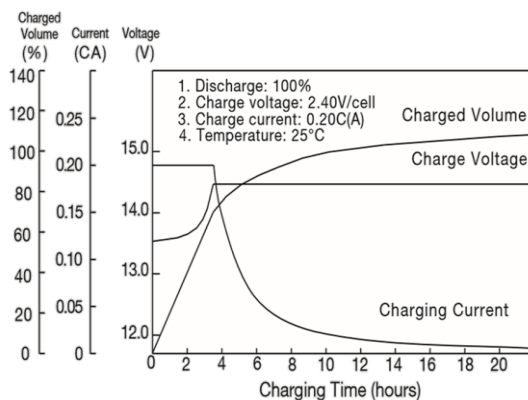
### Self Discharge Characteristics



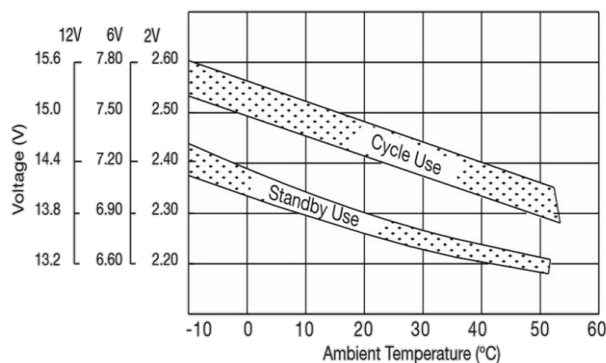
### Discharge Characteristics (25°C)



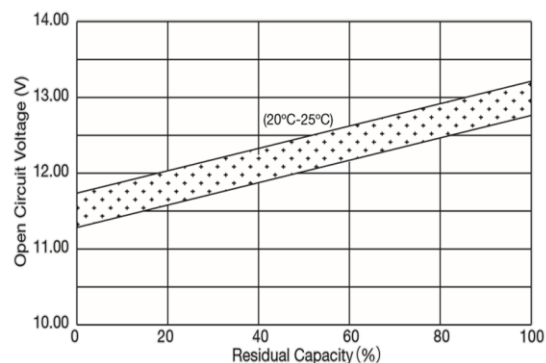
### Charging Characteristics (25°C)



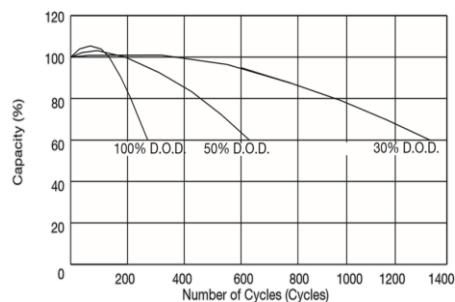
### Relationship Between Charging Voltage and Temperature



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



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



### Temperature Effects on Capacity

