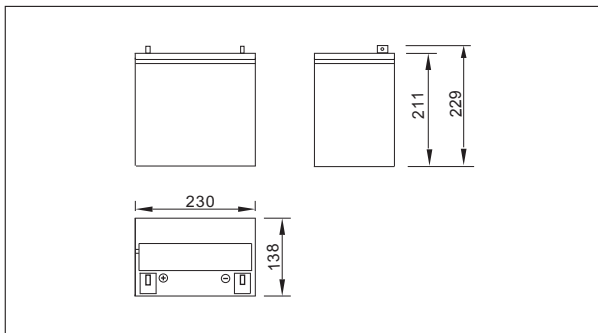


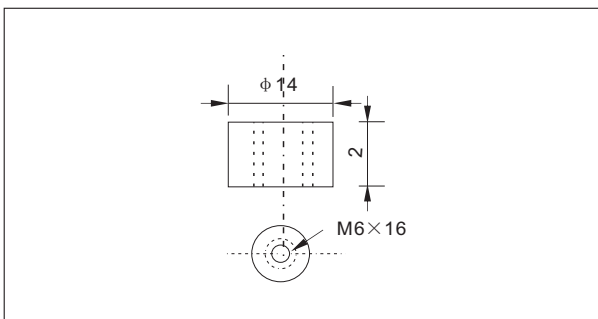
### Specifications

|                               |              |                    |
|-------------------------------|--------------|--------------------|
| Nominal Voltage               |              | 12V                |
| Rated capacity (20 hour rate) |              | 55Ah               |
| Dimensions                    | Length       | 230±2mm(9.06inch)  |
|                               | Width        | 138±2mm(5.43inch)  |
|                               | Height       | 211±2mm(8.31inch)  |
|                               | Total Height | 229±2mm(9.02inch)  |
| Approx. Weight                |              | 17.3kg(38.1lbs)±3% |

### Outer dimensions (mm)



### Terminal Type (mm)



### Characteristics

|   |             |   |
|---|-------------|---|
| Capacity (25°C)                           | 20HR(10.8V) | 55Ah  |
|   | 3HR(10.8V)  | 41.1Ah  |
|   | 1HR(10.5V)  | 30.5Ah  |
| Terminal type                             |             | T14   |
| Internal resistance (Fully charged, 25°C) |             | Approx. 6.5m Ω  |
| Capacity affected by temperature (10HR)   | 40°C        | 102%  |
|   | 25°C        | 100%  |
|   | 0°C         | 85%   |
|   | -15°C       | 65%   |
| Self-discharge (25°C)                     | 3month      | Remaining Capacity:91%                                |
|   | 6month      | Remaining Capacity:82%                                |
|   | 12month     | 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<br>Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C)             |             | 14.50 to 15.00V<br>Temperature compensation: -30mV/°C |
| Maximum charging current                  |             | 16.5A   |
| Terminal material                         |             | Copper  |
| Maximum discharge current                 |             | 550A(5 sec.)  |
| Designed floating life(20°C)              |             | 10years   |

### Construction

| Component    | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte   | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | AGM       | Sulfuric acid | Rubber       | Copper   |

### Constant Current Discharge Characteristics Unit:A(25°C,77°F)

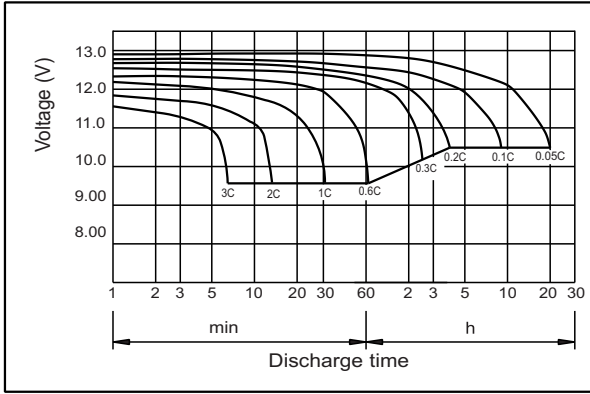
| F.V/Time | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 120   | 92.4  | 55.3  | 34.0  | 20.1 | 14.5 | 11.6 | 9.87 | 6.79 | 5.60 | 2.97 |
| 9.90V    | 116   | 90.2  | 54.2  | 33.5  | 20.0 | 14.4 | 11.5 | 9.82 | 6.75 | 5.59 | 2.96 |
| 10.2V    | 112   | 86.9  | 52.5  | 32.6  | 19.8 | 14.3 | 11.4 | 9.75 | 6.70 | 5.57 | 2.95 |
| 10.5V    | 107   | 83.9  | 51.2  | 31.6  | 19.5 | 14.2 | 11.3 | 9.68 | 6.66 | 5.54 | 2.94 |
| 10.8V    | 101   | 79.5  | 49.4  | 30.6  | 19.0 | 13.8 | 11.0 | 9.39 | 6.46 | 5.50 | 2.92 |

### Constant Power Discharge Characteristics Unit:W(25°C,77°F)

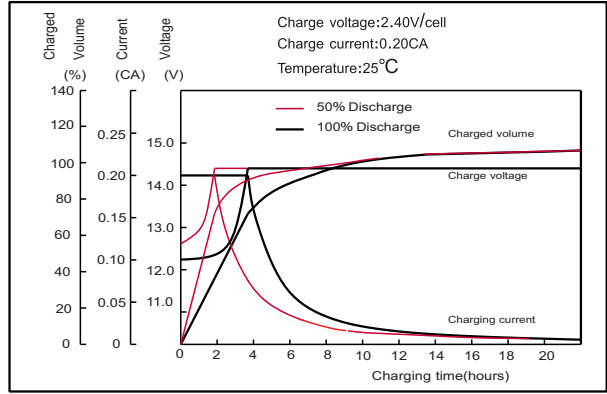
| F.V/Time | 10min | 15min | 30min | 60min | 2h  | 3h  | 4h  | 5h  | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|------|------|------|
| 9.60V    | 1295  | 1015  | 620   | 387   | 233 | 170 | 136 | 117 | 80.6 | 66.9 | 35.6 |
| 9.90V    | 1256  | 990   | 608   | 382   | 231 | 169 | 135 | 116 | 80.2 | 66.7 | 35.5 |
| 10.2V    | 1204  | 954   | 589   | 372   | 229 | 168 | 134 | 115 | 79.6 | 66.5 | 35.4 |
| 10.5V    | 1152  | 921   | 575   | 360   | 226 | 167 | 133 | 114 | 79.1 | 66.1 | 35.2 |
| 10.8V    | 1088  | 873   | 554   | 349   | 220 | 162 | 129 | 111 | 76.7 | 65.7 | 35.0 |

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

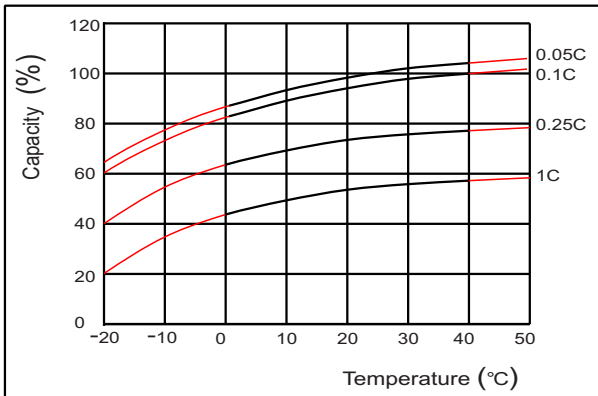
● Discharge characteristics(25°C)



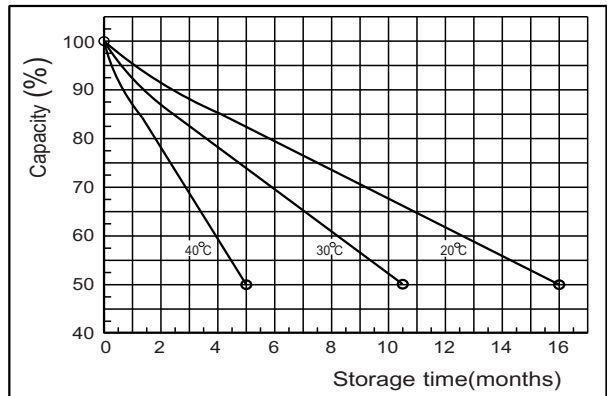
● Charging characteristics (25°C)



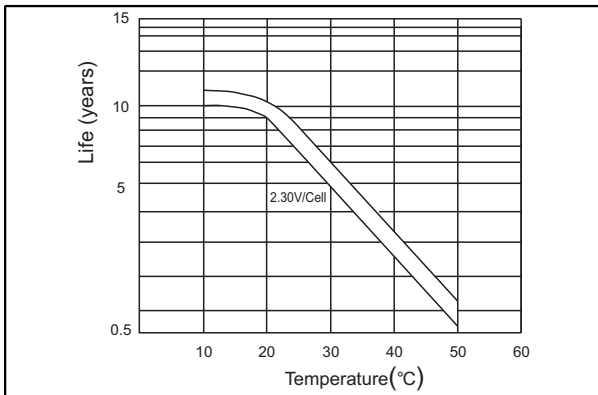
● Temperature effects on Capacity



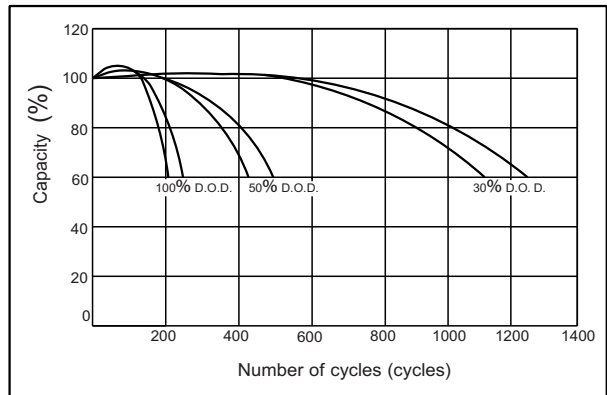
● Self-discharge characteristics



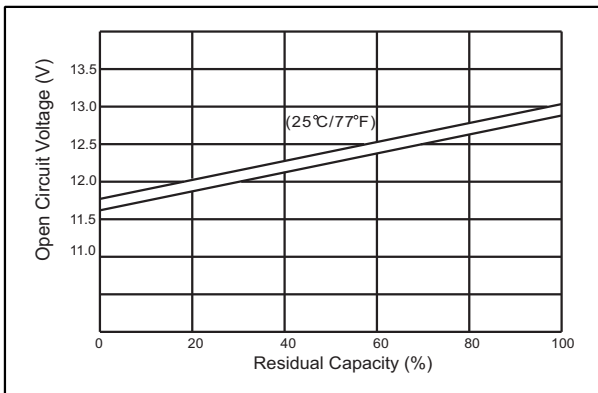
● Floating life on Temperature



● Cycle life on D.O.D (25°C)



● The relationship for OCV and Capacity (25°C)



● The relationship for Charging voltage and Temperature

