



## SW1251W(12V12Ah)



### Specifications

|                                         |              |                      |
|-----------------------------------------|--------------|----------------------|
| Nominal Voltage                         |              | 12V                  |
| CAPACITY(15 minutes rate to 1.67V/cell) |              | 51W                  |
| Rated capacity (20 hour rate)           |              | 12Ah                 |
| Dimensions                              | Total Height | 100 mm (3.94 inches) |
|                                         | Height       | 94 mm (3.70 inches)  |
|                                         | Length       | 151 mm (5.94 inches) |
|                                         | Width        | 98 mm (3.86 inches)  |
| Weight Approx                           |              | 4.1Kg (9.038lbs)     |

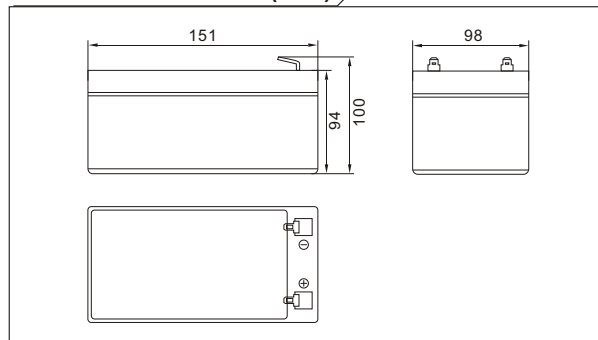
### Characteristics

|                                                         |                                    |                                                                 |
|---------------------------------------------------------|------------------------------------|-----------------------------------------------------------------|
| Capacity<br>25°C(77°F)                                  | 60min rate                         | 92.8W                                                           |
|                                                         | 30min rate                         | 182.3W                                                          |
|                                                         | 10min rate                         | 433.3W                                                          |
|                                                         | 6min rate                          | 588.8W                                                          |
| Internal Resistance                                     | Full charged Battery at 25°C(77°F) | 9 mΩ                                                            |
| Capacity<br>affected<br>by Temperature<br>(20hour rate) | 40°C(104°F)                        | 102%                                                            |
|                                                         | 25°C(77°F)                         | 100%                                                            |
|                                                         | 0°C(32°F)                          | 85%                                                             |
|                                                         | -15°C(5°F)                         | 65%                                                             |
| Self-Discharge<br>at 25°C(77°F)                         | Capacity after 3 month storage     | 91%                                                             |
|                                                         | Capacity after 6 month storage     | 82%                                                             |
|                                                         | Capacity after 12 month storage    | 64%                                                             |
| Terminal                                                |                                    | T1, T2                                                          |
| Charge<br>(constant<br>Voltage)                         | Cycle                              | Initial Charging Current less than 3.0A<br>Voltage 14.10-14.40V |
|                                                         | Float                              | Voltage 13.50-13.80V                                            |

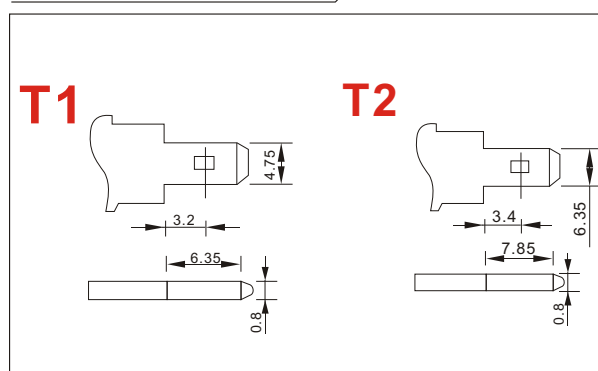
### Constant power discharge unit:watts(25°C, 77 °F)

|       | 2MIN   | 4MIN  | 6MIN  | 8MIN  | 10MIN | 15MIN | 30MIN | 60MIN |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1.6V  | 1012.5 | 755.8 | 588.8 | 503.5 | 433.3 | 319.7 | 182.3 | 98.2  |
| 1.67V | 943.6  | 706.6 | 549.7 | 476.8 | 409.7 | 306.0 | 173.5 | 94.4  |
| 1.7V  | 914.3  | 685.7 | 533.0 | 465.6 | 399.5 | 300.1 | 172.4 | 92.8  |
| 1.75V | 866.6  | 649.4 | 515.4 | 448.0 | 380.0 | 289.6 | 169.7 | 92.4  |
| 1.8V  | 818.9  | 614.1 | 497.8 | 430.5 | 360.4 | 279.1 | 166.9 | 92.0  |
| 1.85V | 771.0  | 578.3 | 480.1 | 412.9 | 340.8 | 267.9 | 164.1 | 91.5  |

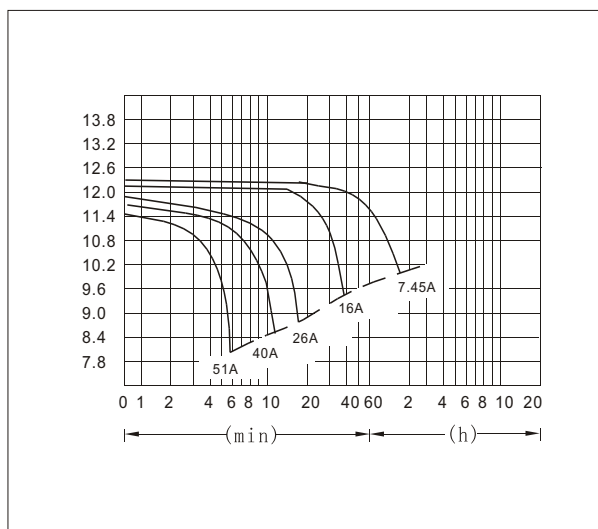
### Outer dimensions (mm)



### Terminal Type (mm)



### Discharge Curves 25°C(77°F)



### Constant current discharge unit:A(25°C, 77 °F)

|       | 5MIN  | 10MIN | 15MIN | 30MIN | 60MIN | 5h    | 10h   | 20h  |
|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.6V  | 51.12 | 40.54 | 28.97 | 16.16 | 8.80  | 23.40 | 11.40 | 0.65 |
| 1.67V | 48.67 | 37.92 | 28.68 | 15.46 | 8.40  | 23.04 | 11.28 | 0.64 |
| 1.7V  | 46.33 | 37.12 | 26.96 | 15.17 | 8.26  | 22.80 | 11.16 | 0.62 |
| 1.75V | 44.02 | 35.12 | 25.91 | 14.88 | 8.23  | 21.96 | 11.04 | 0.60 |
| 1.8V  | 41.10 | 33.12 | 24.83 | 14.60 | 8.18  | 21.36 | 10.80 | 0.59 |
| 1.85V | 39.38 | 32.28 | 23.76 | 14.28 | 8.14  | 20.40 | 10.56 | 0.58 |