## **General Features:**

- Designed floating charging service life: 10 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminium calcium Tin alloy high energy, prevent corrosion

# 



10 Years



Resistance



High Current

Performance



Fast

Charging

Recyclable

, (Pb)

### **Applications:**

Uninterruptible Power Supply (UPS)
Telecom Stations and Power Station

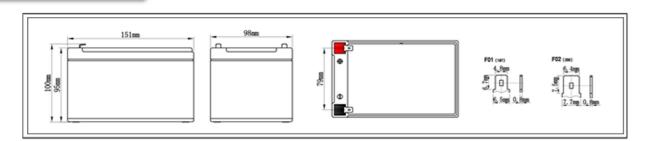
Medical Equipment's
Fire Alarm and Security Systems

DC Power Supply Emergency Lighting

# Physical Specifications:

| Nominal<br>Voltage | Nominal            |        | Dime  | nsions                    |       | Internal Resistance        | Standard                |                       |
|--------------------|--------------------|--------|-------|---------------------------|-------|----------------------------|-------------------------|-----------------------|
|                    | Capacity<br>(10HR) | Length | Width | Width Height Total Height |       | Weight                     | (In full charge status) |                       |
| 12V                | 12AH               | 151mm  | 98mm  | 95mm                      | 100mm | Approx 3.45kg<br>(7.61lbs) | ≈15.5 mΩ                | F01/F02<br>(Standard) |

### **Dimensions:**



### **Constant Voltage Discharge:**

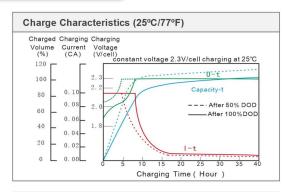
| Rated Capacity                   |         |  |  |  |  |  |  |  |
|----------------------------------|---------|--|--|--|--|--|--|--|
| 20 hour rate (0.60A)             | 12.01AH |  |  |  |  |  |  |  |
| 10 hour rate (1.20A)             | 11.13AH |  |  |  |  |  |  |  |
| 5 hour rate (2.04A)              | 10.00AH |  |  |  |  |  |  |  |
| 27 minute rate( 12.0A)           | 6.00AH  |  |  |  |  |  |  |  |
| 7 minute rate (36.0A)            | 4.20AH  |  |  |  |  |  |  |  |
| Capacity affected by Temperature |         |  |  |  |  |  |  |  |
| 40°C(104°F)                      | 103%    |  |  |  |  |  |  |  |
| 25°C(77°F)                       | 100%    |  |  |  |  |  |  |  |
| 0°C(32°F)                        | 86%     |  |  |  |  |  |  |  |

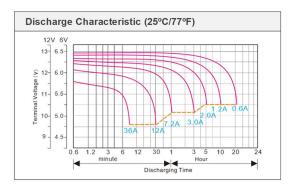
| Cycle Application                                                                                                                                                                                                               |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| 1. Limit initial current less than 3.0A.                                                                                                                                                                                        |  |  |  |  |  |  |  |
| 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).                                                                                                                                            |  |  |  |  |  |  |  |
| 3. Hold at 14.1V to 14.4V until current drop to under 0.072A for at least 3 hours.                                                                                                                                              |  |  |  |  |  |  |  |
| 4. Temperature compensation coefficient of charging voltage is -30mV/°C.                                                                                                                                                        |  |  |  |  |  |  |  |
| Standby Service                                                                                                                                                                                                                 |  |  |  |  |  |  |  |
| 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 3.0A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status. |  |  |  |  |  |  |  |
| 2. Temperature compensation coefficient of charging voltage is -18mV/°C.                                                                                                                                                        |  |  |  |  |  |  |  |

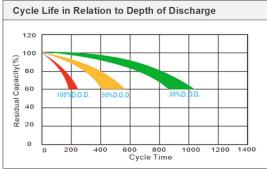
### **Battery Discharge Table:**

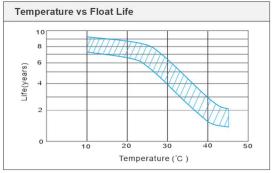
| End                                                     | Minutes (M) |       |       |       |       | Hours (H) |       |      |      |      |      |      |       |
|---------------------------------------------------------|-------------|-------|-------|-------|-------|-----------|-------|------|------|------|------|------|-------|
| Voltage (V)                                             | 5           | 10    | 15    | 30    | 45    | 1         | 1.5   | 2    | 3    | 5    | 8    | 10   | 20    |
| Constant Current Discharge Data Sheet (Amperes at 25°C) |             |       |       |       |       |           |       |      |      |      |      |      |       |
| 1.70                                                    | 44.4        | 28.9  | 22.6  | 11.5  | 8.38  | 7.20      | 5.73  | 4.26 | 3.22 | 2.06 | 1.38 | 1.16 | 0.612 |
| 1.75                                                    | 44.0        | 28.6  | 22.4  | 11.5  | 8.30  | 7.15      | 5.63  | 4.10 | 3.11 | 2.02 | 1.37 | 1.15 | 0.606 |
| 1.80                                                    | 43.5        | 28.3  | 22.2  | 11.3  | 8.22  | 7.10      | 5.52  | 3.94 | 3.00 | 1.98 | 1.35 | 1.14 | 0.600 |
| Constant Power Discharge Data Sheet (Watt at 25°C)      |             |       |       |       |       |           |       |      |      |      |      |      |       |
| 1.70                                                    | 80.67       | 58.17 | 47.00 | 26.57 | 19.37 | 14.74     | 11.30 | 8.50 | 6.07 | 4.00 | 2.82 | 2.28 | 1.23  |
| 1.75                                                    | 77.33       | 56.17 | 45.67 | 26.02 | 18.93 | 14.50     | 11.14 | 8.38 | 5.93 | 3.96 | 2.80 | 2.25 | 1.21  |
| 1.80                                                    | 73.17       | 54.17 | 44.17 | 25.27 | 18.45 | 14.26     | 10.97 | 8.26 | 5.83 | 3.91 | 2.77 | 2.21 | 1.19  |

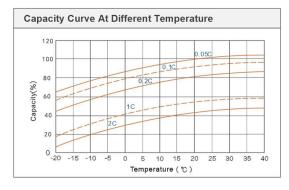
### **Performance Characteristic:**

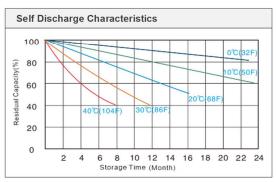












### Note:

The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation. Above Information is subject to change. For further queries, please contact <a href="mailto:info@swiftbatteries.com">info@swiftbatteries.com</a>







