

# Sealed Lead Acid Rechargeable Battery

## SN5-12 12Volt 5Ah

### Specifications

**Nominal Voltage(V)** 12V

#### Nominal Capacity

|              |                    |         |
|--------------|--------------------|---------|
| 20 hour rate | (0.225A to 10.50V) | 5Ah     |
| 10 hour rate | (0.428A to 10.50V) | 4.275Ah |
| 5 hour rate  | (0.765A to 10.20V) | 3.825Ah |
| 1 C          | (4.5A to 9.60V)    | 2.55Ah  |
| 3 C          | (13.5A to 9.60V)   | 1.8Ah   |

**Weight** Approx. 1.62Kg(3.56Lbs.)

**Internal Resistance (at 1KHz)** Approx. 34.5mΩ

**Maximum Discharge Current for**  
5 seconds: 67.5A

#### Charging Methods at 25 °C (77 °F)

##### Cycle use:

Charging Voltage 14.4 to 15V

Coefficient -5.0mV/°C/cell

Maximum Charging Current: 1.5A

##### Standby use:

Float Charging Voltage 13.5 to 13.8V

Coefficient -3.0mV/°C/cell

#### Operating Temperature Range

Charge -15°C (5°F) to 40°C (104°F)

Discharge -15°C (5°F) to 50°C (122°F)

Storage -15°C (5°F) to 40°C (104°F)

#### Charge Retention (shelf life) at 20 °C(68°F)

1 month 92%

3 month 90%

6 month 80%

**Case Material** ABS UL94 HB

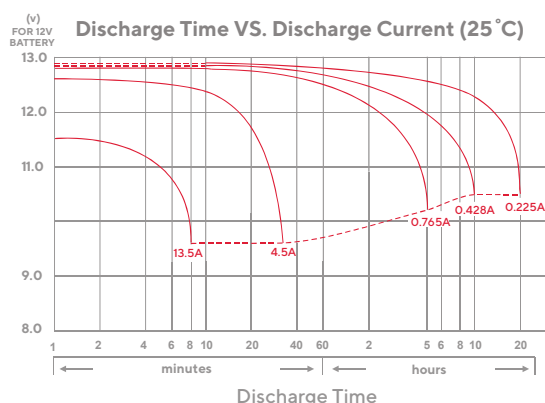
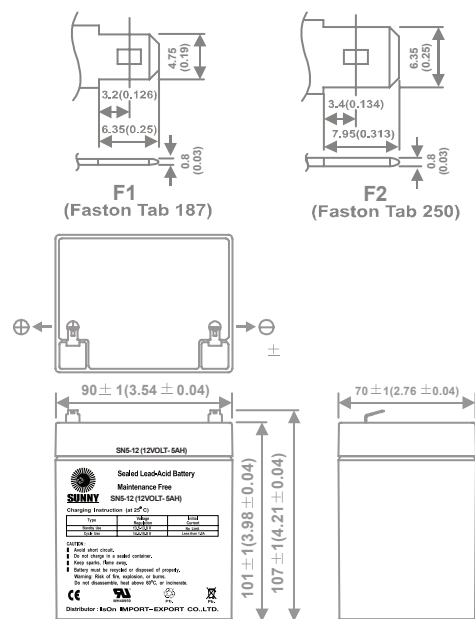
Option: Flammability resistance of (UL94 V-0)

**Terminal** F1 or F2 (Faston Tab 187 or 250)

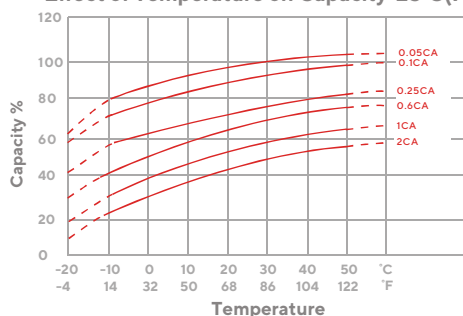


### Dimensions

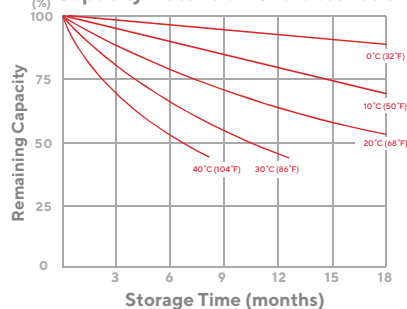
mm(inch)



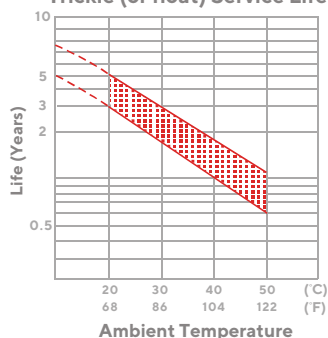
**Effect of Temperature on Capacity 25°C(77°F)**



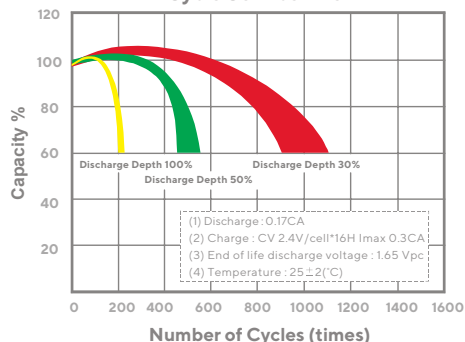
**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**



## PERFORMANCE DATA

### - Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5    | min         | 22.7  | 25.7  | 27.8  | 29.8  | 30.7  | 31.7  | 32.8  |
| 10   | min         | 16.4  | 18.7  | 20.0  | 21.0  | 21.3  | 21.8  | 22.3  |
| 15   | min         | 13.3  | 14.8  | 15.4  | 15.8  | 16.0  | 16.1  | 16.3  |
| 30   | min         | 7.78  | 8.73  | 9.08  | 9.43  | 9.53  | 9.65  | 9.77  |
| 60   | min         | 4.38  | 4.95  | 5.32  | 5.62  | 5.68  | 5.78  | 5.87  |
| 120  | min         | 2.70  | 2.97  | 3.10  | 3.20  | 3.25  | 3.32  | 3.38  |
| 180  | min         | 2.12  | 2.30  | 2.40  | 2.47  | 2.50  | 2.55  | 2.60  |
| 240  | min         | 1.72  | 1.85  | 1.93  | 1.98  | 2.02  | 2.03  | 2.07  |
| 300  | min         | 1.53  | 1.64  | 1.68  | 1.72  | 1.73  | 1.75  | 1.78  |
| 600  | min         | 0.950 | 1.01  | 1.03  | 1.05  | 1.07  | 1.09  | 1.10  |
| 1200 | min         | 0.490 | 0.518 | 0.538 | 0.552 | 0.555 | 0.562 | 0.568 |

### - Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5    | min         | 14.9  | 17.0  | 18.3  | 18.8  | 19.0  | 19.2  | 19.4  |
| 10   | min         | 10.0  | 11.3  | 11.6  | 11.8  | 11.9  | 12.0  | 12.1  |
| 15   | min         | 7.21  | 7.83  | 8.31  | 8.53  | 8.58  | 8.65  | 8.74  |
| 30   | min         | 4.36  | 4.82  | 4.97  | 5.11  | 5.15  | 5.21  | 5.26  |
| 60   | min         | 2.53  | 2.78  | 2.89  | 2.97  | 2.99  | 3.02  | 3.05  |
| 120  | min         | 1.42  | 1.54  | 1.62  | 1.65  | 1.66  | 1.67  | 1.69  |
| 180  | min         | 1.14  | 1.21  | 1.23  | 1.25  | 1.26  | 1.27  | 1.28  |
| 240  | min         | 0.889 | 0.948 | 0.973 | 0.996 | 1.00  | 1.01  | 1.02  |
| 300  | min         | 0.808 | 0.839 | 0.852 | 0.863 | 0.867 | 0.872 | 0.878 |
| 600  | min         | 0.458 | 0.480 | 0.495 | 0.503 | 0.507 | 0.511 | 0.515 |
| 1200 | min         | 0.231 | 0.245 | 0.257 | 0.265 | 0.268 | 0.272 | 0.276 |

All data on the spec. sheet is an average value:

The tolerance range :  $X < 6\text{min}$  (+15%~-15%),  $6\text{min} \leq X < 10\text{min}$  (+12%~-12%),  $10\text{min} \leq X < 60\text{min}$  (+8%~-8%),  $\geq X < 60\text{min}$  (+5%~-5%)