

### Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

|              |                    |        |
|--------------|--------------------|--------|
| 20 hour rate | (0.25A to 10.50V)  | 5Ah    |
| 10 hour rate | (0.475A to 10.50V) | 4.75Ah |
| 5 hour rate  | (0.85A to 10.20V)  | 4.25Ah |
| 1 C          | (5A to 9.60V)      | 2.67Ah |
| 3 C          | (15A to 9.60V)     | 1.75Ah |

#### Weight

Approx. 1.62kg(3.56Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 34 mΩ

#### Maximum Discharge Current for

5 seconds: 75A

#### Charging Methods at 25°C(77°F)

|                            |                |
|----------------------------|----------------|
| 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)

#### Design Life

3-5 Years.

#### Terminal

F1 or F2 (Faston Tab 187 or 250)



### Dimensions

#### Length (L)

90±1 (3.54±0.04)

#### Width (W)

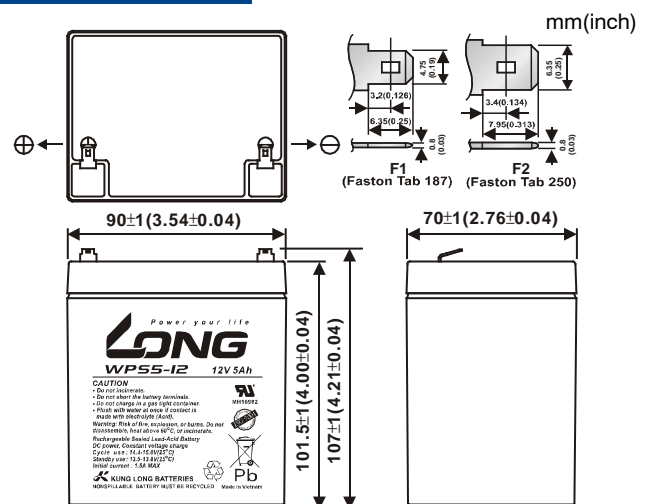
70±1 (2.76±0.04)

#### Height (H)

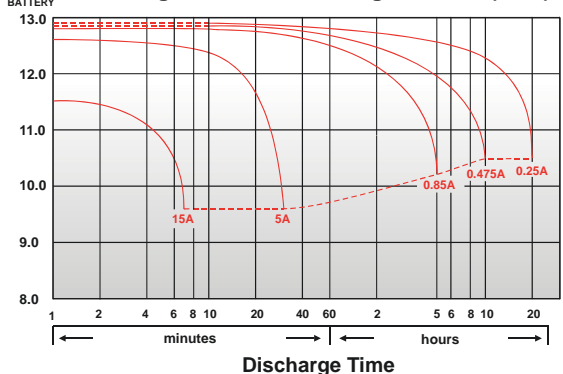
101.5±1 (4.00±0.04)

#### Overall Height (HT)

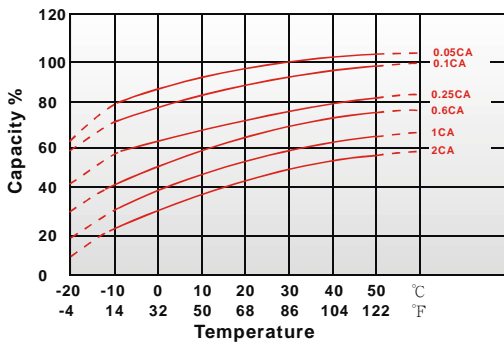
107±1 (4.21±0.04)



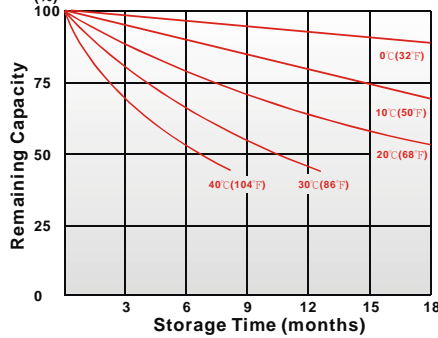
#### (V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



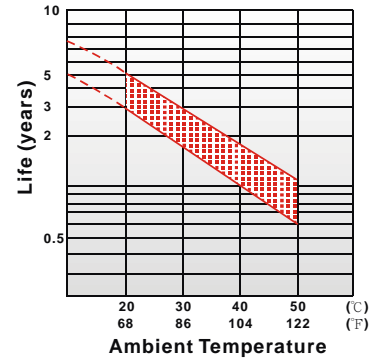
**Effect of Temperature on Capacity 25°C(77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**- PERFORMANCE DATA**

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

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time        |     |       |       |       |       |       |       |       |
| 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)**

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| Time        |     |       |       |       |       |       |       |       |
| 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%),  $X \geq 60\text{min}$ (+5%~-5%)

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