

### 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 |
| 1C           | (5A     | to | 9.60V)  | 3.17Ah |
| 3C           | (15A    | to | 9.60V)  | 2Ah    |

#### Weight

Approx. 1.85kg(4.07Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 19 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 & Standard

Expected Trickle Design Life: 6-9 years at 20°C according to Eurobat.

#### Terminal

F1 or F2 (Faston Tab 187 or 250)



### Dimensions

#### Length (L)

90±1 (3.54±0.04)

#### Width (W)

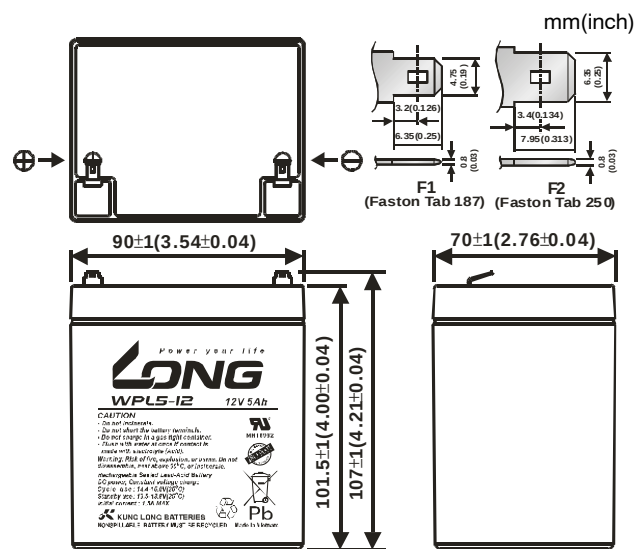
70±1 (2.76±0.04)

#### Height (H)

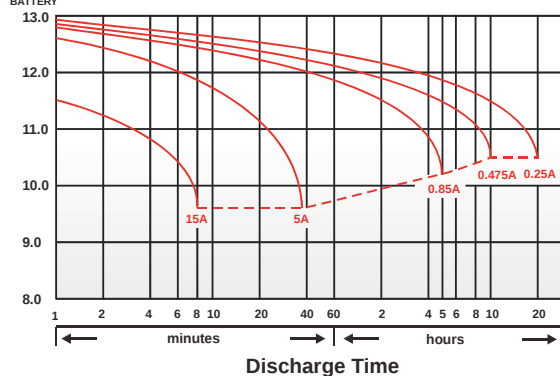
101.5±1 (4.00±0.04)

#### Overall Height (HT)

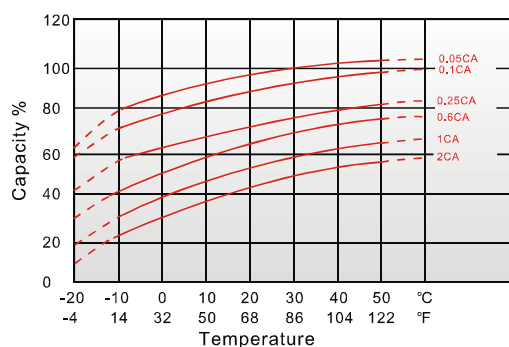
107±1 (4.21±0.04)



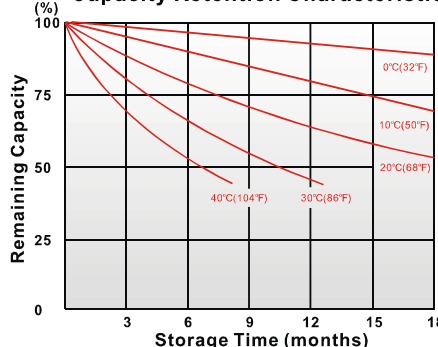
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



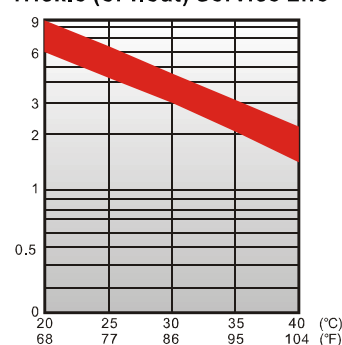
Effect of Temperature on Capacity 25°C(77°F)



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 | 36.3  | 39.5  | 41.5  | 43.5  | 44.3  | 45.5  | 47.0  |
| 10          | min | 25.7  | 27.7  | 29.2  | 30.2  | 30.7  | 31.3  | 32.3  |
| 15          | min | 19.7  | 21.2  | 21.8  | 22.5  | 22.8  | 23.2  | 23.7  |
| 30          | min | 11.2  | 11.7  | 12.1  | 12.5  | 12.7  | 12.8  | 12.9  |
| 60          | min | 5.95  | 6.27  | 6.47  | 6.70  | 6.82  | 6.93  | 7.07  |
| 120         | min | 3.13  | 3.38  | 3.53  | 3.65  | 3.72  | 3.80  | 3.92  |
| 180         | min | 2.53  | 2.72  | 2.85  | 2.97  | 3.02  | 3.07  | 3.15  |
| 240         | min | 2.02  | 2.15  | 2.27  | 2.33  | 2.37  | 2.40  | 2.45  |
| 300         | min | 1.73  | 1.87  | 1.95  | 1.98  | 2.00  | 2.02  | 2.05  |
| 600         | min | 1.01  | 1.09  | 1.15  | 1.17  | 1.18  | 1.19  | 1.21  |
| 1200        | min | 0.530 | 0.572 | 0.603 | 0.615 | 0.620 | 0.625 | 0.633 |

### - 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 | 17.8  | 21.7  | 23.9  | 25.8  | 26.4  | 27.0  | 27.8  |
| 10          | min | 13.2  | 14.8  | 15.7  | 16.2  | 16.6  | 16.9  | 17.3  |
| 15          | min | 9.92  | 10.5  | 10.9  | 11.1  | 11.2  | 11.3  | 11.5  |
| 30          | min | 5.84  | 6.15  | 6.26  | 6.38  | 6.42  | 6.47  | 6.55  |
| 60          | min | 3.04  | 3.20  | 3.38  | 3.46  | 3.49  | 3.53  | 3.59  |
| 120         | min | 1.58  | 1.70  | 1.79  | 1.87  | 1.91  | 1.94  | 1.99  |
| 180         | min | 1.27  | 1.35  | 1.41  | 1.47  | 1.49  | 1.52  | 1.55  |
| 240         | min | 1.00  | 1.07  | 1.11  | 1.15  | 1.16  | 1.18  | 1.21  |
| 300         | min | 0.851 | 0.898 | 0.919 | 0.942 | 0.953 | 0.962 | 0.978 |
| 600         | min | 0.497 | 0.506 | 0.514 | 0.521 | 0.524 | 0.529 | 0.535 |
| 1200        | min | 0.268 | 0.274 | 0.279 | 0.284 | 0.286 | 0.287 | 0.291 |

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

The tolerance range : X<6min(+15%~-15%), 6min≤X<10min(+12%~-12%), 10min≤X<60min(+8%~-8%), X≥60min(+5%~-5%)

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