

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

|              |                   |         |
|--------------|-------------------|---------|
| 20 hour rate | (1.7A to 10.50V)  | 34Ah    |
| 10 hour rate | (3.23A to 10.50V) | 32.3Ah  |
| 5 hour rate  | (5.78A to 10.20V) | 28.9Ah  |
| 1 C          | (34A to 9.60V)    | 19.27Ah |
| 3 C          | (102A to 9.60V)   | 13.6Ah  |

#### Weight

Approx. 10.5kg(23.1Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 11 mΩ

#### Maximum Discharge Current for

5 seconds: 510A

#### Charging Methods at 25°C(77°F)

|                            |                |
|----------------------------|----------------|
| Cycle use:                 |                |
| Charging Voltage           | 14.4 to 15.0V  |
| Coefficient                | -5.0mV/°C/cell |
| Maximum Charging Current : | 10.2A          |
| 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

F4



### ⚡ Dimensions

#### Length (L)

197±<sup>2</sup><sub>1</sub> (7.76±<sup>0.08</sup><sub>0.04</sub>)

#### Width (W)

131±<sup>2</sup><sub>1</sub> (5.16±<sup>0.08</sup><sub>0.04</sub>)

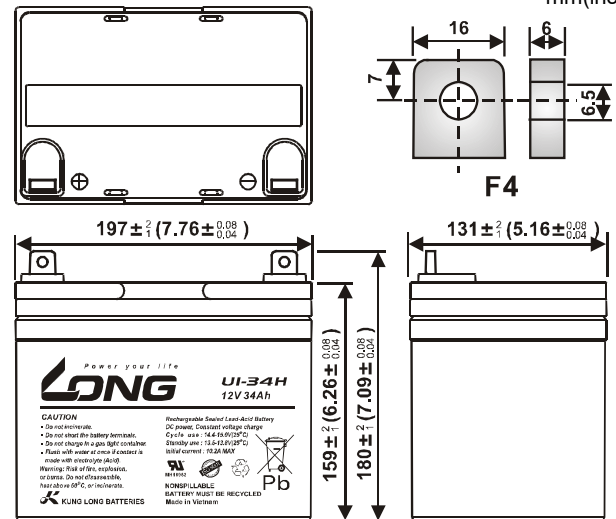
#### Height (H)

159±<sup>2</sup><sub>1</sub> (6.26±<sup>0.08</sup><sub>0.04</sub>)

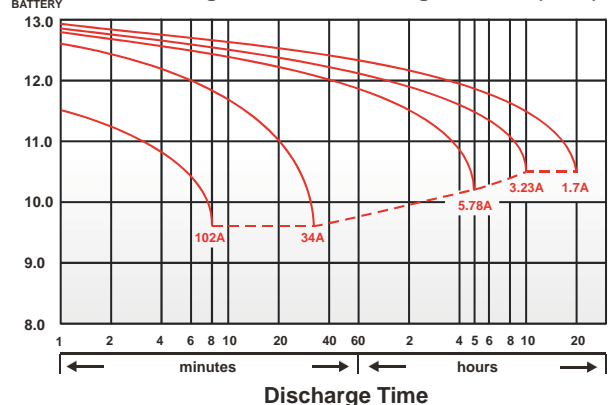
#### Overall Height (HT)

180±<sup>2</sup><sub>1</sub> (7.09±<sup>0.08</sup><sub>0.04</sub>)

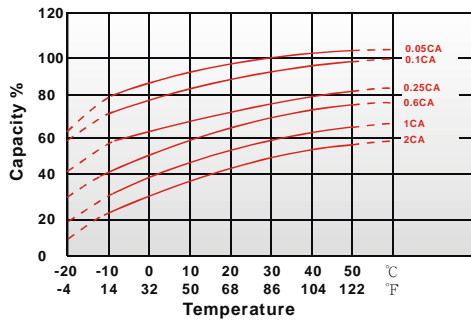
mm(inch)



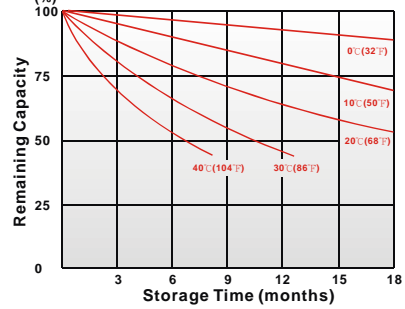
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



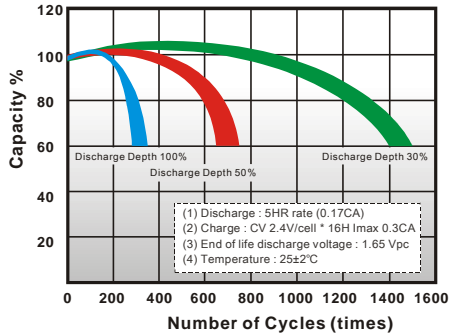
Effect of Temperature on Capacity 25°C (77°F)



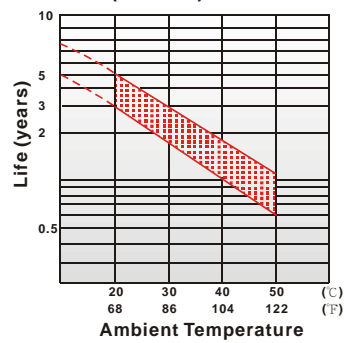
Capacity Retention Characteristic



Cycle Service Life



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 | 123   | 165   | 197   | 217   | 224   | 231   | 240   |
| 10          | min | 86.9  | 114   | 134   | 147   | 151   | 156   | 162   |
| 15          | min | 70.3  | 91.1  | 106   | 116   | 119   | 123   | 127   |
| 30          | min | 38.2  | 49.5  | 57.8  | 63.0  | 64.7  | 66.6  | 69.0  |
| 60          | min | 36.2  | 38.5  | 39.9  | 40.9  | 41.2  | 41.6  | 42.0  |
| 120         | min | 22.6  | 23.8  | 24.6  | 25.1  | 25.2  | 25.5  | 25.7  |
| 180         | min | 15.3  | 16.3  | 16.9  | 17.3  | 17.5  | 17.6  | 17.8  |
| 240         | min | 12.3  | 13.1  | 13.6  | 13.9  | 14.1  | 14.2  | 14.3  |
| 300         | min | 10.5  | 11.2  | 11.6  | 11.9  | 12.0  | 12.1  | 12.2  |
| 600         | min | 6.22  | 6.61  | 6.86  | 7.02  | 7.08  | 7.15  | 7.21  |
| 1200        | min | 3.26  | 3.47  | 3.60  | 3.68  | 3.72  | 3.75  | 3.78  |

#### - 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 | 88.7  | 109   | 123   | 132   | 135   | 139   | 143   |
| 10          | min | 61.5  | 71.4  | 77.5  | 81.8  | 83.7  | 86.2  | 89.3  |
| 15          | min | 51.2  | 58.6  | 63.4  | 66.1  | 66.9  | 67.8  | 69.2  |
| 30          | min | 29.6  | 33.5  | 35.1  | 36.4  | 36.8  | 37.3  | 37.9  |
| 60          | min | 17.7  | 19.0  | 19.9  | 20.6  | 20.8  | 21.1  | 21.4  |
| 120         | min | 10.6  | 11.4  | 11.9  | 12.3  | 12.4  | 12.6  | 12.8  |
| 180         | min | 7.86  | 8.37  | 8.73  | 8.99  | 9.06  | 9.14  | 9.27  |
| 240         | min | 5.91  | 6.35  | 6.73  | 6.92  | 6.97  | 7.04  | 7.15  |
| 300         | min | 5.38  | 5.66  | 5.82  | 5.95  | 6.00  | 6.06  | 6.14  |
| 600         | min | 3.11  | 3.23  | 3.33  | 3.42  | 3.45  | 3.48  | 3.52  |
| 1200        | min | 1.60  | 1.69  | 1.75  | 1.79  | 1.80  | 1.82  | 1.84  |

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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