

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | | | |
|--------------|--------|----|---------|--------|
| 20 hour rate | (0.1A | to | 10.50V) | 2Ah |
| 10 hour rate | (0.19A | to | 10.50V) | 1.9Ah |
| 5 hour rate | (0.34A | to | 10.20V) | 1.7Ah |
| 1 C | (2A | to | 9.60V) | 1.13Ah |
| 3 C | (6A | to | 9.60V) | 0.8Ah |

Weight

Approx. 728g(1.60Lbs.)

Internal Resistance (at 1KHz)

Approx. 57 mΩ

Maximum Discharge Current for

5 seconds: 30A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|----------------|
| Cycle use: | |
| Charging Voltage | 14.4 to 15.0V |
| Coefficient | -5.0mV/°C/cell |
| Maximum Charging Current : | 0.6A |
| 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 (Faston Tab 187)



⚡ Dimensions

Length (L)

150±1 (5.91±0.04)

Width (W)

20±1 (0.79±0.04)

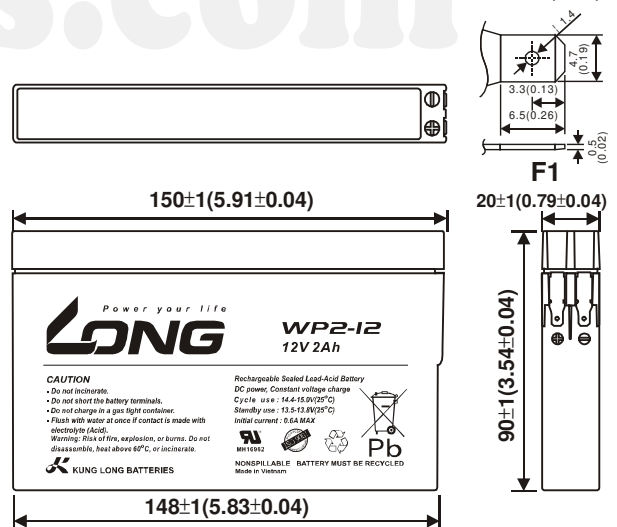
Height (H)

90±1 (3.54±0.04)

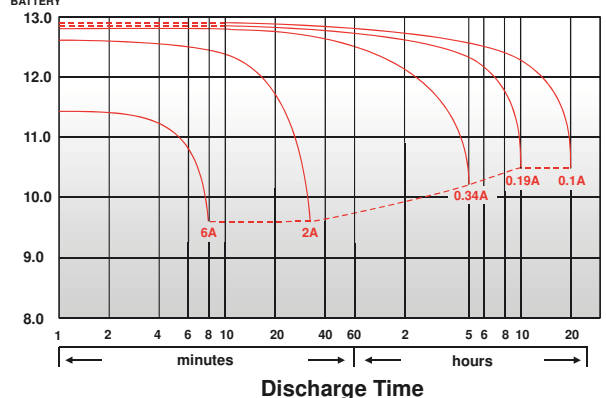
Overall Height (HT)

90±1 (3.54±0.04)

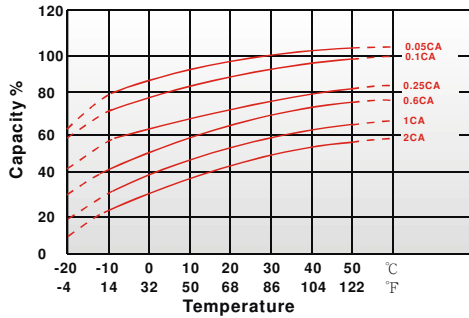
mm(inch)



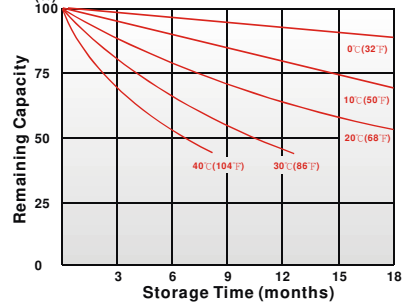
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



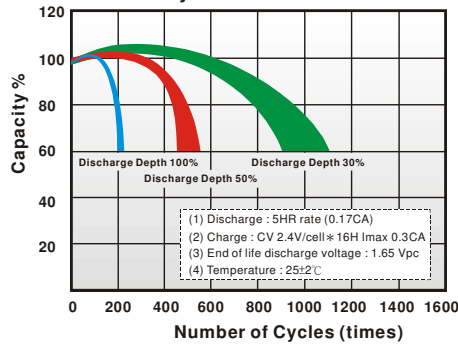
Effect of Temperature on Capacity 25°C(77°F)



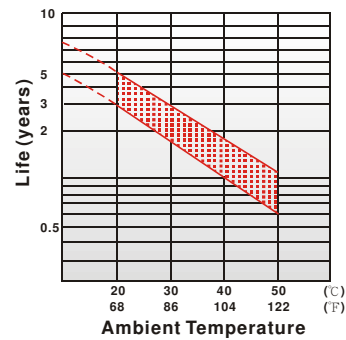
Capacity Retention Characteristic



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 | 9.30 | 10.6 | 11.6 | 12.4 | 12.8 | 13.2 | 13.7 |
| 10 | min | 6.07 | 6.98 | 7.78 | 8.32 | 8.53 | 8.75 | 9.10 |
| 15 | min | 5.30 | 5.90 | 6.25 | 6.52 | 6.62 | 6.73 | 6.87 |
| 30 | min | 3.45 | 3.72 | 3.92 | 4.07 | 4.12 | 4.18 | 4.25 |
| 60 | min | 2.10 | 2.22 | 2.30 | 2.37 | 2.38 | 2.42 | 2.45 |
| 120 | min | 1.31 | 1.39 | 1.42 | 1.45 | 1.46 | 1.47 | 1.49 |
| 180 | min | 0.922 | 0.978 | 1.01 | 1.03 | 1.04 | 1.05 | 1.06 |
| 240 | min | 0.720 | 0.762 | 0.788 | 0.810 | 0.818 | 0.827 | 0.837 |
| 300 | min | 0.615 | 0.647 | 0.668 | 0.685 | 0.692 | 0.698 | 0.707 |
| 600 | min | 0.357 | 0.375 | 0.390 | 0.400 | 0.403 | 0.408 | 0.413 |
| 1200 | min | 0.187 | 0.197 | 0.203 | 0.208 | 0.210 | 0.212 | 0.213 |

- 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 | 5.08 | 5.84 | 6.48 | 7.12 | 7.36 | 7.68 | 8.12 |
| 10 | min | 3.41 | 4.01 | 4.33 | 4.62 | 4.73 | 4.86 | 5.07 |
| 15 | min | 2.59 | 3.01 | 3.25 | 3.44 | 3.51 | 3.59 | 3.68 |
| 30 | min | 1.67 | 1.86 | 2.02 | 2.15 | 2.21 | 2.26 | 2.32 |
| 60 | min | 1.09 | 1.16 | 1.20 | 1.23 | 1.24 | 1.25 | 1.26 |
| 120 | min | 0.667 | 0.709 | 0.721 | 0.730 | 0.733 | 0.737 | 0.742 |
| 180 | min | 0.458 | 0.487 | 0.500 | 0.509 | 0.512 | 0.516 | 0.521 |
| 240 | min | 0.365 | 0.381 | 0.392 | 0.401 | 0.404 | 0.408 | 0.412 |
| 300 | min | 0.316 | 0.326 | 0.334 | 0.340 | 0.342 | 0.345 | 0.348 |
| 600 | min | 0.183 | 0.189 | 0.194 | 0.198 | 0.200 | 0.201 | 0.203 |
| 1200 | min | 0.096 | 0.099 | 0.101 | 0.102 | 0.102 | 0.103 | 0.104 |

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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