

⚡ Specifications

Nominal Voltage(V)

12V

Nominal Power

15 mins rate: 28W/cell to 1.60V/cell

Nominal Capacity

| | | | | |
|--------------|---------|----|---------|--------|
| 20 hour rate | (0.35A | to | 10.50V) | 7Ah |
| 10 hour rate | (0.665A | to | 10.50V) | 6.65Ah |
| 5 hour rate | (1.19A | to | 10.20V) | 5.95Ah |
| 1 C | (7A | to | 9.60V) | 4.43Ah |
| 3 C | (21A | to | 9.60V) | 2.8Ah |

Weight

Approx. 2.24kg(4.93Lbs.)

Internal Resistance (at 1KHz)

Approx. 19 mΩ

Maximum Discharge Current for

5 seconds: 105A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|----------------|
| Cycle use: | |
| Charging Voltage | 14.4 to 15.0V |
| Coefficient | -5.0mV/°C/cell |
| Maximum Charging Current : | 2.1A |
| 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

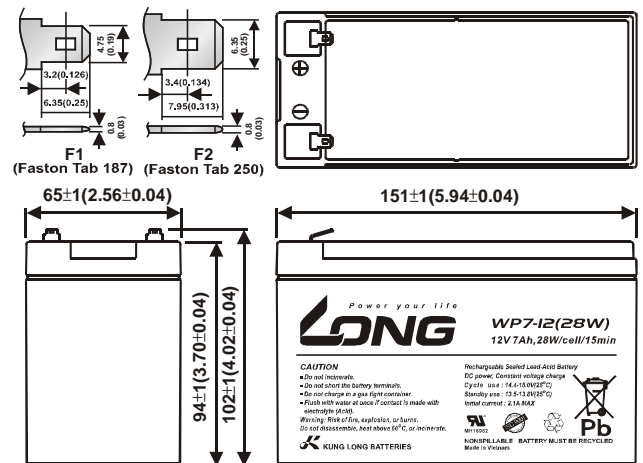
F1 or F2 (Faston Tab 187 or 250)



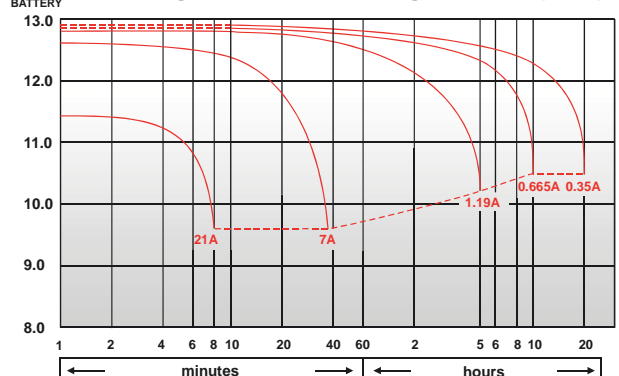
⚡ Dimensions

| | |
|---------------------|-------------------|
| Length (L) | 151±1 (5.94±0.04) |
| Width (W) | 65±1 (2.56±0.04) |
| Height (H) | 94±1 (3.70±0.04) |
| Overall Height (HT) | 102±1 (4.02±0.04) |

mm(inch)

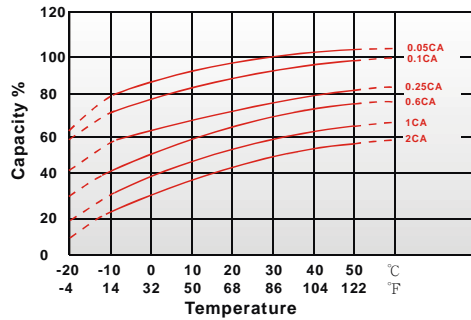


(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)

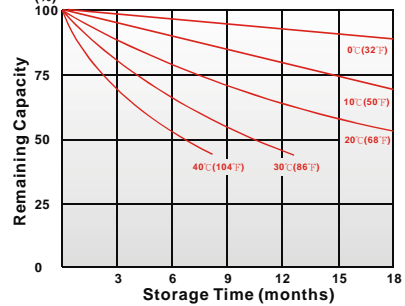


Discharge Time

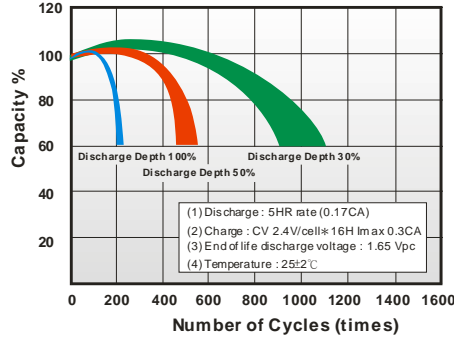
Effect of Temperature on Capacity 25°C(77°F)



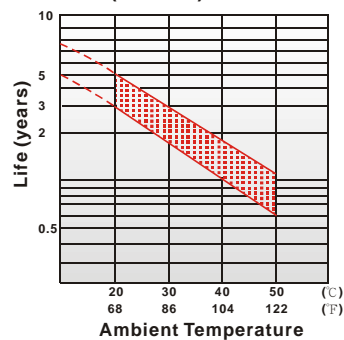
Capacity Retention Characteristic



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 | 43.8 | 47.0 | 49.0 | 51.0 | 51.8 | 52.8 | 54.3 |
| 10 | min | 30.0 | 31.8 | 33.2 | 34.3 | 34.8 | 35.5 | 36.5 |
| 15 | min | 24.0 | 25.2 | 25.8 | 26.5 | 26.8 | 27.3 | 28.0 |
| 30 | min | 12.1 | 12.9 | 13.6 | 14.1 | 14.3 | 14.4 | 14.6 |
| 60 | min | 7.70 | 8.38 | 8.63 | 8.87 | 8.97 | 9.08 | 9.23 |
| 120 | min | 4.10 | 4.52 | 4.72 | 4.92 | 4.98 | 5.07 | 5.20 |
| 180 | min | 3.08 | 3.32 | 3.48 | 3.62 | 3.67 | 3.72 | 3.80 |
| 240 | min | 2.85 | 2.93 | 3.00 | 3.05 | 3.07 | 3.10 | 3.15 |
| 300 | min | 2.47 | 2.53 | 2.58 | 2.62 | 2.63 | 2.65 | 2.68 |
| 600 | min | 1.36 | 1.40 | 1.42 | 1.43 | 1.44 | 1.44 | 1.45 |
| 1200 | min | 0.690 | 0.705 | 0.718 | 0.728 | 0.732 | 0.737 | 0.743 |

- 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 | 23.1 | 26.2 | 27.8 | 29.1 | 29.6 | 30.5 | 31.7 |
| 10 | min | 16.1 | 17.3 | 18.1 | 18.6 | 18.9 | 19.2 | 19.8 |
| 15 | min | 12.6 | 13.1 | 13.5 | 13.8 | 14.0 | 14.1 | 14.3 |
| 30 | min | 6.54 | 7.05 | 7.28 | 7.47 | 7.56 | 7.68 | 7.85 |
| 60 | min | 4.02 | 4.25 | 4.41 | 4.52 | 4.58 | 4.63 | 4.71 |
| 120 | min | 2.26 | 2.38 | 2.45 | 2.49 | 2.51 | 2.54 | 2.57 |
| 180 | min | 1.65 | 1.74 | 1.79 | 1.82 | 1.83 | 1.85 | 1.88 |
| 240 | min | 1.35 | 1.40 | 1.44 | 1.47 | 1.49 | 1.51 | 1.53 |
| 300 | min | 1.10 | 1.16 | 1.21 | 1.25 | 1.27 | 1.28 | 1.29 |
| 600 | min | 0.667 | 0.675 | 0.682 | 0.687 | 0.690 | 0.694 | 0.698 |
| 1200 | min | 0.339 | 0.346 | 0.350 | 0.353 | 0.355 | 0.357 | 0.359 |

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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