

Specifications

Nominal Voltage(V)

12V

Nominal Capacity

| | | |
|--------------|--------------------|--------|
| 20 hour rate | (0.35A to 10.50V) | 7Ah |
| 10 hour rate | (0.63A to 10.50V) | 6.3Ah |
| 5 hour rate | (1.131A to 10.20V) | 5.65Ah |
| 1 C | (7A to 9.60V) | 3.5Ah |
| 3 C | (21A to 9.60V) | 2.1Ah |

Weight

Approx. 2.0kg(4.4Lbs.)

Internal Resistance (at 1KHz)

Approx. 28 mΩ

Maximum Discharge Current for

5 seconds: 105A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|---------------|
| 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

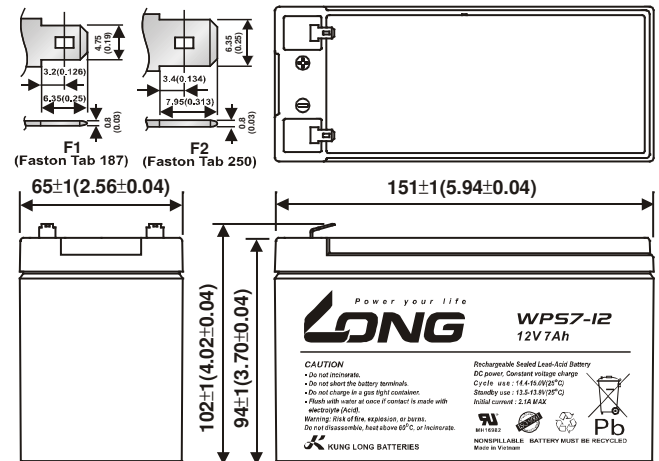
F1 or F2 (Faston Tab 187 or 250)



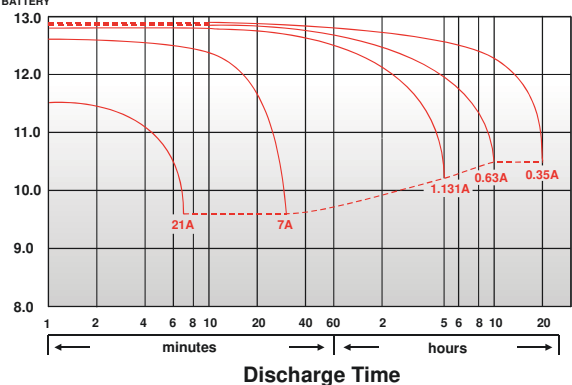
Dimensions

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

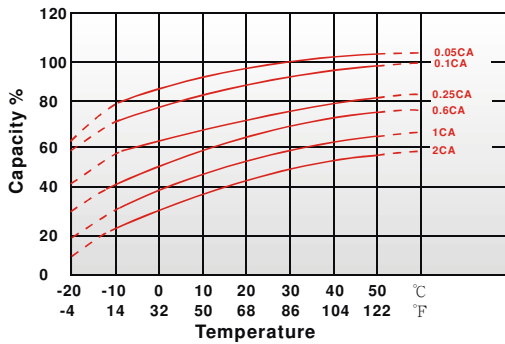
mm(inch)



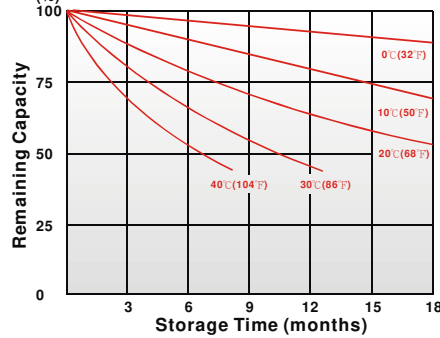
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



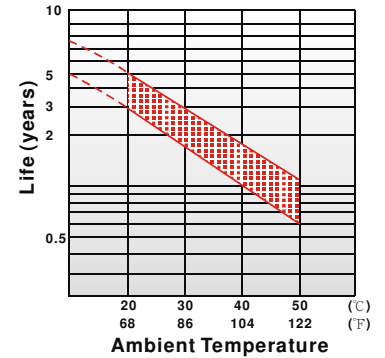
Effect of Temperature on Capacity 25°C(77°F)



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 | | | | | | | | |
| 2 | min | 48.9 | 67.6 | 83.2 | 93.2 | 97.0 | 99.1 | 102 |
| 4 | min | 33.4 | 43.5 | 51.7 | 56.8 | 58.7 | 59.8 | 61.5 |
| 6 | min | 26.3 | 33.2 | 38.6 | 41.9 | 43.2 | 44.0 | 45.1 |
| 8 | min | 22.3 | 27.5 | 31.5 | 33.9 | 34.9 | 35.4 | 36.2 |
| 10 | min | 19.3 | 23.3 | 26.4 | 28.3 | 29.0 | 29.4 | 30.1 |
| 15 | min | 15.8 | 18.5 | 20.5 | 21.7 | 22.2 | 22.4 | 22.9 |
| 20 | min | 13.4 | 15.3 | 16.7 | 17.5 | 17.9 | 18.1 | 18.4 |
| 30 | min | 10.7 | 11.8 | 12.6 | 13.1 | 13.3 | 13.4 | 13.6 |
| 60 | min | 7.38 | 7.72 | 7.92 | 7.99 | 8.03 | 8.06 | 8.06 |
| 90 | min | 5.35 | 5.58 | 5.70 | 5.76 | 5.78 | 5.80 | 5.86 |
| 120 | min | 4.26 | 4.43 | 4.52 | 4.56 | 4.58 | 4.60 | 4.63 |
| 180 | min | 3.26 | 3.37 | 3.44 | 3.46 | 3.48 | 3.49 | 3.51 |
| 240 | min | 2.60 | 2.68 | 2.73 | 2.75 | 2.76 | 2.77 | 2.79 |
| 300 | min | 2.18 | 2.24 | 2.28 | 2.29 | 2.30 | 2.31 | 2.32 |
| 480 | min | 1.50 | 1.53 | 1.56 | 1.57 | 1.57 | 1.58 | 1.58 |
| 600 | min | 1.26 | 1.28 | 1.30 | 1.31 | 1.31 | 1.32 | 1.32 |
| 1200 | min | 0.686 | 0.695 | 0.702 | 0.706 | 0.708 | 0.710 | 0.711 |

- 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 | | | | | | | | |
| 2 | min | 28.2 | 39.0 | 48.0 | 53.8 | 55.9 | 57.2 | 59.0 |
| 4 | min | 18.5 | 24.2 | 28.7 | 31.5 | 32.6 | 33.2 | 34.2 |
| 6 | min | 14.5 | 18.3 | 21.3 | 23.1 | 23.8 | 24.2 | 24.8 |
| 8 | min | 12.2 | 15.0 | 17.2 | 18.5 | 19.0 | 19.3 | 19.8 |
| 10 | min | 10.5 | 12.7 | 14.4 | 15.4 | 15.8 | 16.1 | 16.4 |
| 15 | min | 8.33 | 9.72 | 10.8 | 11.4 | 11.7 | 11.8 | 12.0 |
| 20 | min | 7.00 | 7.97 | 8.70 | 9.15 | 9.32 | 9.43 | 9.60 |
| 30 | min | 5.47 | 6.03 | 6.44 | 6.70 | 6.80 | 6.87 | 6.97 |
| 60 | min | 3.72 | 3.89 | 3.99 | 4.03 | 4.05 | 4.06 | 4.06 |
| 90 | min | 2.69 | 2.81 | 2.87 | 2.90 | 2.91 | 2.92 | 2.95 |
| 120 | min | 2.14 | 2.22 | 2.27 | 2.29 | 2.30 | 2.31 | 2.33 |
| 180 | min | 1.63 | 1.69 | 1.72 | 1.73 | 1.74 | 1.75 | 1.76 |
| 240 | min | 1.30 | 1.34 | 1.36 | 1.37 | 1.38 | 1.38 | 1.39 |
| 300 | min | 1.08 | 1.12 | 1.13 | 1.14 | 1.15 | 1.15 | 1.16 |
| 480 | min | 0.745 | 0.762 | 0.773 | 0.778 | 0.781 | 0.784 | 0.787 |
| 600 | min | 0.623 | 0.636 | 0.644 | 0.649 | 0.651 | 0.653 | 0.656 |
| 1200 | min | 0.341 | 0.345 | 0.348 | 0.350 | 0.352 | 0.352 | 0.353 |

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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