

Specifications

Nominal Voltage(V)

12V

Nominal Power

15 mins rate: 23W/cell to 1.67V/cell

Nominal Capacity

| | | | | |
|--------------|--------|----|---------|--------|
| 20 hour rate | (0.25A | to | 10.50V) | 5Ah |
| 8 hour rate | (0.6A | to | 10.50V) | 4.8Ah |
| 5 hour rate | (0.85A | to | 10.20V) | 4.25Ah |

Weight

Approx. 1.97kg(4.33Lbs.)

Internal Resistance (at 1KHz)

Approx. 17 mΩ

Maximum Discharge Current for

5 seconds: 75A

Short Circuit Current (A)

300 A

Charging Methods at 25°C(77°F)

| | |
|----------------------------|----------------|
| Maximum Charging Current : | 1.5A |
| Boost Charging Voltage | 14.4 to 15.0V |
| Boost Charge Time | 8-9Hr |
| 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 | 98% |
| 3 month | 96% |
| 6 month | 94% |

Case Material

ABS UL94 HB
Option: Flammability resistance of (UL94 V-0)

Battery Construction

| Component | Positive Plate | Negative plate | Safety valve | Terminal | Separator | Electrolyte |
|--------------|----------------|----------------|--------------|----------|------------|---------------|
| Raw material | Lead dioxide | Lead | Rubber | Copper | Fiberglass | Sulfuric acid |



Dimensions

Length (L)

90±1 (3.54±0.04)

Width (W)

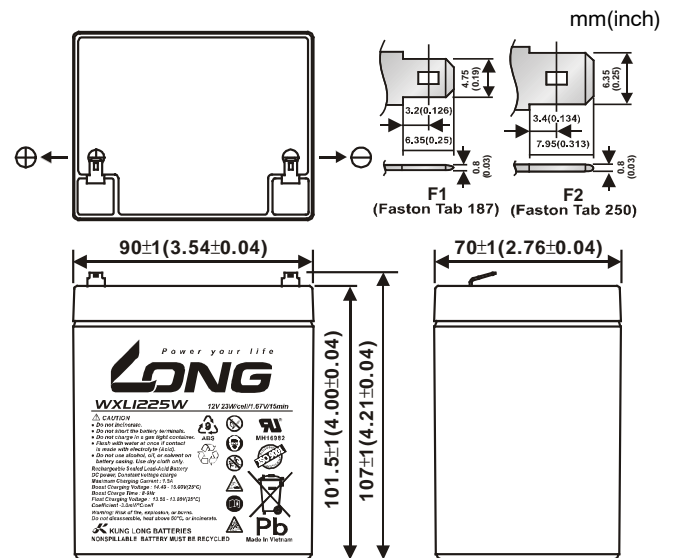
70±1 (2.76±0.04)

Height (H)

101.5±1 (4.00±0.04)

Overall Height (HT)

107±1 (4.21±0.04)



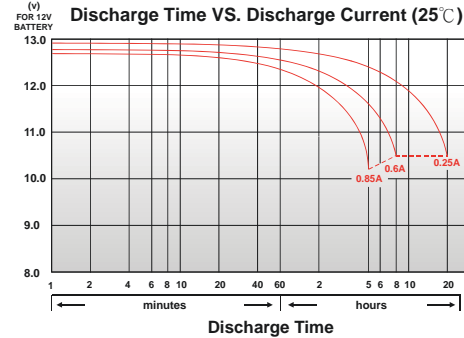
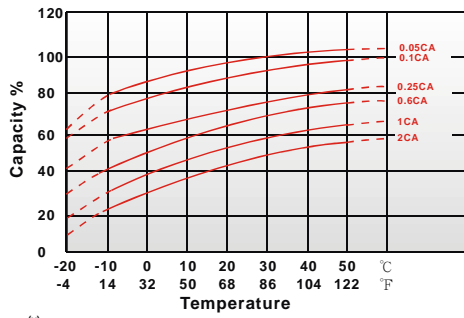
Terminal

F1 or F2 (Faston Tab 187 or 250)

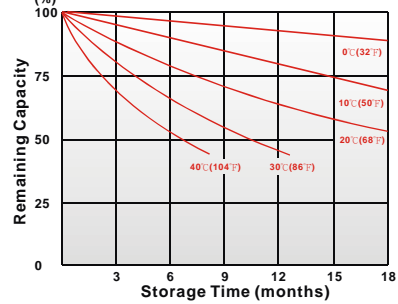
Design Life

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

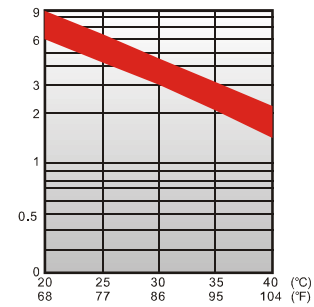
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C(77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 2 | min | 57.2 | 61.7 | 65.6 | 67.8 | 70.0 | 71.8 | 73.6 |
| 4 | min | 42.9 | 45.8 | 48.3 | 50.8 | 53.3 | 55.8 | 58.2 |
| 5 | min | 37.1 | 40.1 | 43.0 | 45.7 | 47.0 | 48.2 | 49.3 |
| 6 | min | 36.0 | 39.0 | 41.7 | 42.5 | 43.0 | 43.7 | 43.6 |
| 8 | min | 33.2 | 35.2 | 36.3 | 36.7 | 37.1 | 37.5 | 37.7 |
| 10 | min | 26.2 | 28.3 | 29.8 | 30.6 | 31.0 | 31.3 | 31.6 |
| 15 | min | 21.5 | 22.2 | 22.7 | 23.1 | 23.5 | 23.8 | 24.0 |
| 20 | min | 17.1 | 17.9 | 18.5 | 18.9 | 19.2 | 19.5 | 19.7 |
| 30 | min | 12.0 | 12.7 | 13.1 | 13.3 | 13.4 | 13.5 | 13.6 |
| 45 | min | 8.94 | 9.59 | 10.2 | 10.4 | 10.6 | 10.7 | 10.8 |
| 60 | min | 5.97 | 6.45 | 6.70 | 6.93 | 7.05 | 7.15 | 7.28 |
| 90 | min | 5.03 | 5.38 | 5.69 | 5.77 | 5.85 | 5.91 | 5.95 |
| 120 | min | 3.15 | 3.63 | 3.85 | 3.98 | 4.07 | 4.16 | 4.20 |
| 180 | min | 2.43 | 2.65 | 2.85 | 2.97 | 3.04 | 3.11 | 3.16 |
| 240 | min | 2.08 | 2.21 | 2.32 | 2.38 | 2.42 | 2.46 | 2.50 |
| 300 | min | 1.70 | 1.82 | 1.90 | 1.94 | 1.98 | 2.01 | 2.04 |
| 480 | min | 1.10 | 1.19 | 1.25 | 1.29 | 1.30 | 1.31 | 1.32 |
| 1200 | min | 0.519 | 0.544 | 0.573 | 0.580 | 0.585 | 0.590 | 0.594 |

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

| Time | End Voltage | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 2 | min | 27.6 | 31.3 | 34.3 | 36.9 | 38.9 | 40.9 | 42.1 |
| 4 | min | 24.9 | 26.4 | 27.3 | 28.0 | 28.6 | 29.1 | 29.6 |
| 5 | min | 18.7 | 22.8 | 25.2 | 26.4 | 27.0 | 27.3 | 27.5 |
| 6 | min | 17.6 | 21.1 | 22.2 | 23.1 | 23.7 | 24.1 | 24.4 |
| 8 | min | 16.5 | 17.7 | 18.5 | 19.1 | 19.7 | 20.1 | 20.3 |
| 10 | min | 13.8 | 15.0 | 15.9 | 16.7 | 16.9 | 17.3 | 17.8 |
| 15 | min | 10.6 | 11.3 | 11.7 | 12.0 | 12.2 | 12.4 | 12.6 |
| 20 | min | 9.03 | 9.35 | 9.63 | 9.74 | 9.82 | 9.90 | 9.95 |
| 30 | min | 5.98 | 6.31 | 6.49 | 6.59 | 6.68 | 6.77 | 6.85 |
| 45 | min | 4.65 | 4.96 | 5.24 | 5.30 | 5.34 | 5.36 | 5.38 |
| 60 | min | 3.09 | 3.34 | 3.48 | 3.57 | 3.63 | 3.69 | 3.74 |
| 90 | min | 2.53 | 2.73 | 2.85 | 2.91 | 2.97 | 3.03 | 3.08 |
| 120 | min | 1.72 | 1.85 | 1.92 | 1.98 | 2.01 | 2.03 | 2.06 |
| 180 | min | 1.37 | 1.46 | 1.51 | 1.55 | 1.57 | 1.59 | 1.61 |
| 240 | min | 0.974 | 1.05 | 1.09 | 1.13 | 1.15 | 1.17 | 1.18 |
| 300 | min | 0.863 | 0.868 | 0.872 | 0.874 | 0.876 | 0.878 | 0.880 |
| 480 | min | 0.533 | 0.572 | 0.600 | 0.625 | 0.634 | 0.639 | 0.643 |
| 1200 | min | 0.240 | 0.249 | 0.256 | 0.258 | 0.259 | 0.260 | 0.261 |

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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