

### 12SB36C (12V 36Ah)

#### SPECIFICATIONS

Nominal Voltage (V) 12V

#### Nominal Capacity

|                                |        |
|--------------------------------|--------|
| 20 hour rate (1.80A to 10.50V) | 36Ah   |
| 10 hour rate (3.42A to 10.50V) | 34.2Ah |
| 5 hour rate (6.12A to 10.20V)  | 30.6Ah |
| 1C (36A to 9.60V)              | 22.8Ah |
| 3C (108A to 9.60V)             | 14.4Ah |

Weight Approx. 10.7kg (23.54lbs)

Internal Resistance (@1kHz) Approx. 8mΩ

#### Maximum Discharge Current

For 5 seconds 540A

#### Charging Methods @25°C (77°F)

##### Cycle Use:

Charging Voltage 14.4V to 15.0V

Coefficient -5.0mV/°C/Cell

Maximum Charging Current 10.8A

##### Standby Use:

Float Charging Voltage 13.50V to 13.80V

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) @20°C (68°F)

1 month 92%

3 months 90%

6 months 80%

Case Material ABS

Terminal F8

#### Description of Torque Value of Hard Ware for the Terminals

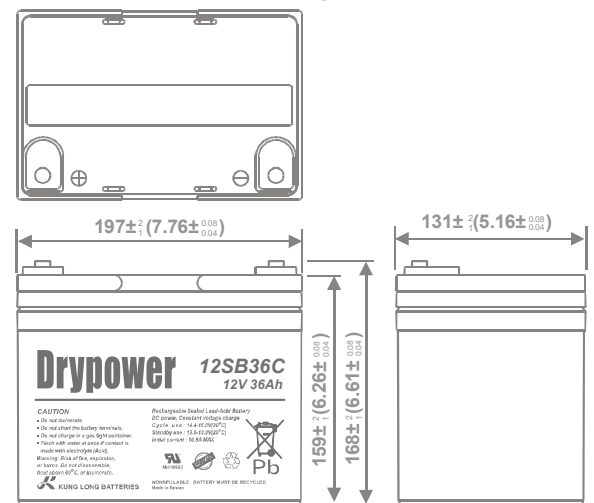
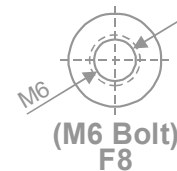
Recommended Torque Value M6: 5.39 N-m (55kg-cm)

Max. Allowable Torque Value M6: 8.82 N-m (90kg-cm)

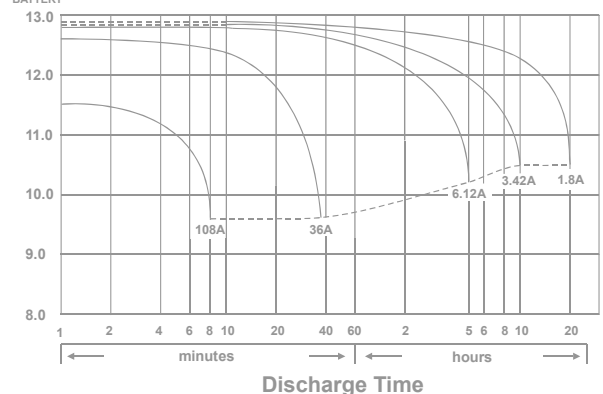


#### DIMENSIONS

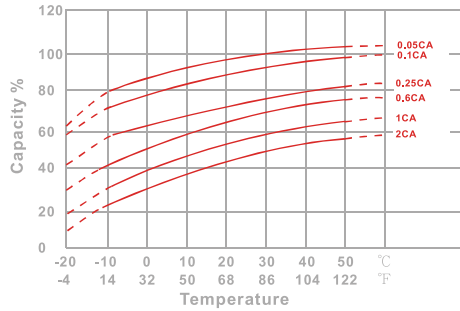
mm (inch)



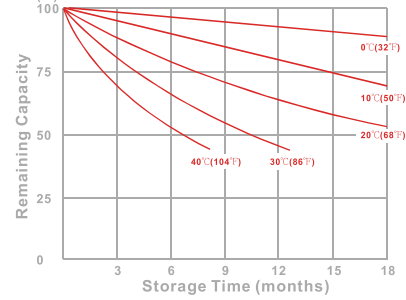
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



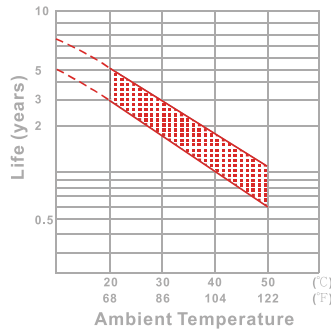
Effect of Temperature on Capacity 25°C (77°F)



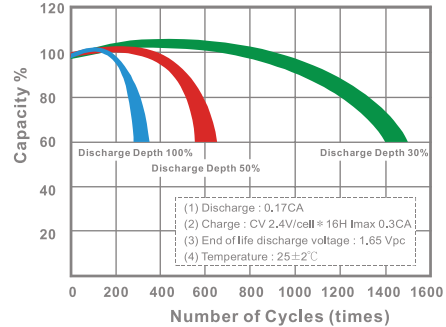
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle 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 |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5    | min         | 1051  | 1129  | 1218  | 1289  | 1325  | 1358  | 1408  |
| 10   | min         | 801   | 851   | 902   | 947   | 980   | 1000  | 1046  |
| 15   | min         | 703   | 739   | 763   | 786   | 795   | 817   | 836   |
| 30   | min         | 442   | 457   | 466   | 474   | 478   | 483   | 491   |
| 60   | min         | 265   | 274   | 280   | 285   | 287   | 289   | 292   |
| 120  | min         | 146   | 153   | 158   | 162   | 163   | 165   | 167   |
| 180  | min         | 111   | 116   | 120   | 123   | 124   | 125   | 126   |
| 240  | min         | 89.7  | 91.5  | 92.9  | 94.2  | 94.8  | 95.3  | 96.1  |
| 300  | min         | 73.6  | 75.0  | 76.1  | 77.2  | 77.7  | 78.1  | 78.8  |
| 600  | min         | 42.7  | 43.5  | 44.2  | 44.9  | 45.6  | 46.0  | 46.5  |
| 1200 | min         | 21.8  | 22.5  | 23.0  | 23.5  | 23.7  | 23.9  | 24.2  |

**- 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 |
|------|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5    | min         | 93.3  | 104   | 115   | 124   | 128   | 132   | 139   |
| 10   | min         | 69.0  | 74.3  | 79.4  | 84.2  | 86.7  | 89.4  | 93.9  |
| 15   | min         | 60.8  | 63.7  | 64.9  | 66.0  | 66.4  | 66.9  | 67.6  |
| 30   | min         | 37.3  | 38.9  | 39.8  | 40.6  | 41.1  | 41.4  | 42.1  |
| 60   | min         | 20.6  | 21.7  | 22.6  | 23.4  | 23.7  | 24.1  | 24.5  |
| 120  | min         | 11.7  | 12.3  | 12.8  | 13.2  | 13.3  | 13.5  | 13.7  |
| 180  | min         | 8.89  | 9.21  | 9.42  | 9.61  | 9.68  | 9.75  | 9.83  |
| 240  | min         | 7.38  | 7.52  | 7.59  | 7.64  | 7.66  | 7.69  | 7.73  |
| 300  | min         | 6.27  | 6.38  | 6.43  | 6.48  | 6.50  | 6.52  | 6.55  |
| 600  | min         | 3.52  | 3.59  | 3.64  | 3.68  | 3.69  | 3.71  | 3.73  |
| 1200 | min         | 1.81  | 1.88  | 1.93  | 1.96  | 1.97  | 1.98  | 1.99  |

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%)

Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.