

12SB55CL (12V 55Ah)

SPECIFICATIONS

Nominal Voltage (V) 12V

Nominal Capacity

| | |
|---------------------------------|---------|
| 20 hour rate (2.750A to 10.50V) | 55Ah |
| 10 hour rate (5.225A to 10.50V) | 52.25Ah |
| 5 hour rate (9.350A to 10.20V) | 46.75Ah |
| 1C (55A to 9.60V) | 31.17Ah |
| 3C (165A to 9.60V) | 22Ah |

Weight Approx. 17kg (37.4lbs)

Internal Resistance (@1kHz) Approx. 8mΩ

Maximum Discharge Current

For 5 seconds 660A

Charging Methods @25°C (77°F)

Cycle Use:

| | |
|----------------------------|----------------|
| Charging Voltage | 14.4V to 15.0V |
| Coefficient -5.0mV/°C/Cell | |
| Maximum Charging Current | 16.5A |

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)

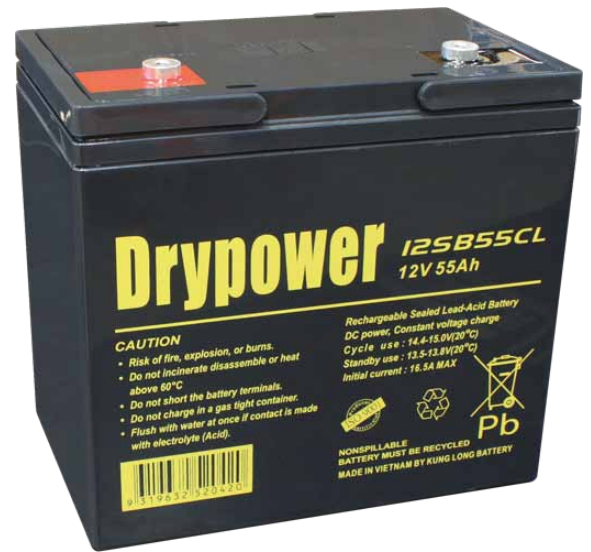
| | |
|----------|-----|
| 1 month | 98% |
| 3 months | 94% |
| 6 months | 85% |

Case Material ABS

Terminal F8

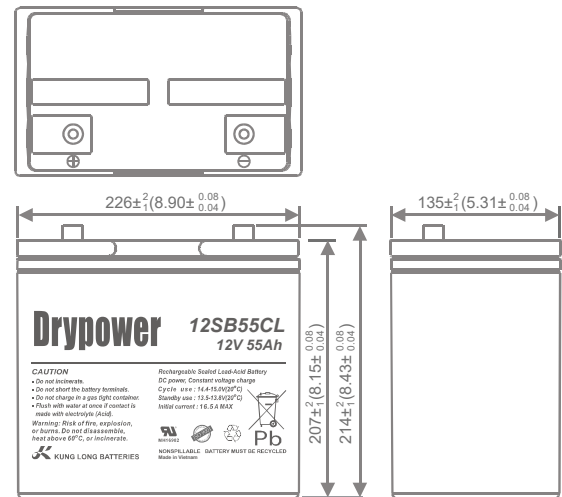
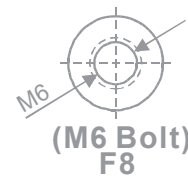
Description of Torque Value of Hard Ware for the Terminals

| | |
|-----------------------------|------------------------|
| Recommended Torque Value | M6: 5.39 N-m (55kg-cm) |
| Max. Allowable Torque Value | M6: 8.82 N-m (90kg-cm) |

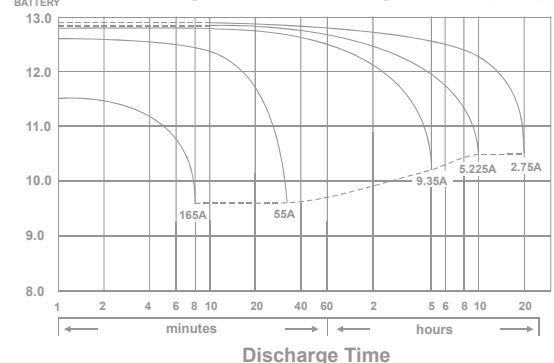


DIMENSIONS

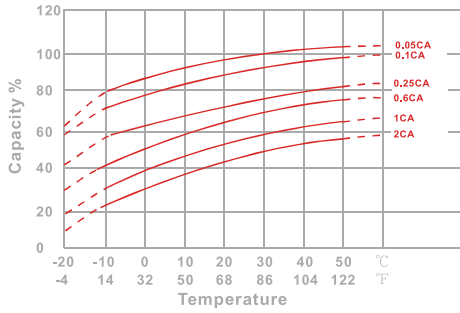
mm (inch)



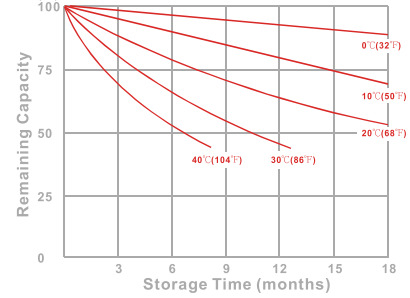
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



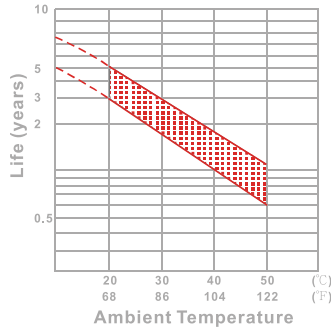
Effect of Temperature on Capacity 25°C(77°F)



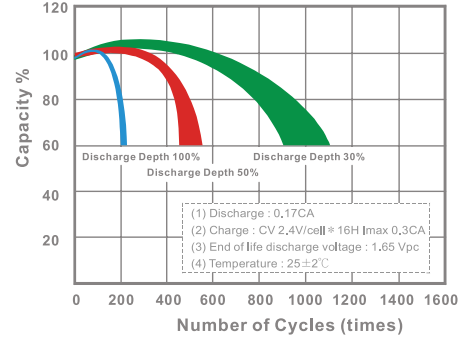
Capacity Retention Characteristic



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 | 1968 | 2283 | 2478 | 2581 | 2603 | 2625 | 2661 |
| 10 | min | 1263 | 1465 | 1590 | 1656 | 1670 | 1685 | 1708 |
| 15 | min | 981 | 1123 | 1210 | 1254 | 1265 | 1276 | 1292 |
| 30 | min | 521 | 597 | 642 | 663 | 670 | 678 | 687 |
| 60 | min | 388 | 405 | 416 | 425 | 428 | 432 | 436 |
| 120 | min | 195 | 208 | 217 | 223 | 225 | 227 | 230 |
| 180 | min | 158 | 169 | 175 | 179 | 180 | 182 | 184 |
| 240 | min | 131 | 138 | 142 | 145 | 146 | 147 | 148 |
| 300 | min | 110 | 116 | 120 | 122 | 123 | 124 | 125 |
| 600 | min | 63.8 | 66.7 | 68.4 | 69.5 | 69.5 | 69.9 | 70.4 |
| 1200 | min | 32.9 | 34.7 | 35.6 | 36.3 | 36.5 | 36.8 | 37.1 |

- 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 | 176 | 204 | 219 | 228 | 231 | 234 | 238 |
| 10 | min | 110 | 127 | 138 | 143 | 145 | 147 | 149 |
| 15 | min | 83.5 | 95.6 | 103 | 107 | 108 | 109 | 110 |
| 30 | min | 43.8 | 50.2 | 54.1 | 55.8 | 56.4 | 57.0 | 57.7 |
| 60 | min | 29.4 | 33.2 | 34.5 | 35.4 | 35.7 | 36.1 | 36.5 |
| 120 | min | 16.9 | 18.4 | 19.2 | 19.8 | 20.0 | 20.3 | 20.6 |
| 180 | min | 13.0 | 13.8 | 14.3 | 14.7 | 14.8 | 15.0 | 15.2 |
| 240 | min | 10.9 | 11.5 | 11.7 | 11.9 | 12.0 | 12.1 | 12.2 |
| 300 | min | 9.32 | 9.74 | 9.92 | 10.1 | 10.2 | 10.3 | 10.4 |
| 600 | min | 5.39 | 5.63 | 5.65 | 5.71 | 5.73 | 5.76 | 5.80 |
| 1200 | min | 2.76 | 2.89 | 2.96 | 3.00 | 3.01 | 3.03 | 3.05 |

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.