

### 12SB40CL (12V 40Ah)

#### SPECIFICATIONS

Nominal Voltage (V) 12V

#### Nominal Capacity

20 hour rate (2.0A to 10.50V)	40Ah
10 hour rate (3.8A to 10.50V)	38Ah
5 hour rate (6.8A to 10.20V)	34Ah
1C (40A to 9.60V)	22.67Ah
3C (120A to 9.60V)	16Ah

Weight Approx. 13.1kg (28.82lbs)

Internal Resistance (@1kHz) Approx. 7mΩ

#### Maximum Discharge Current

For 5 seconds 375A

#### Charging Methods @25°C (77°F)

##### Cycle Use:

Charging Voltage	14.4V to 15.0V
Coefficient -5.0mV/°C/Cell	
Maximum Charging Current	12A

##### 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%

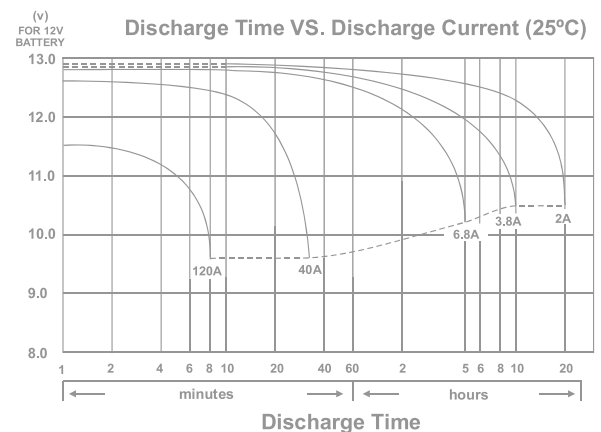
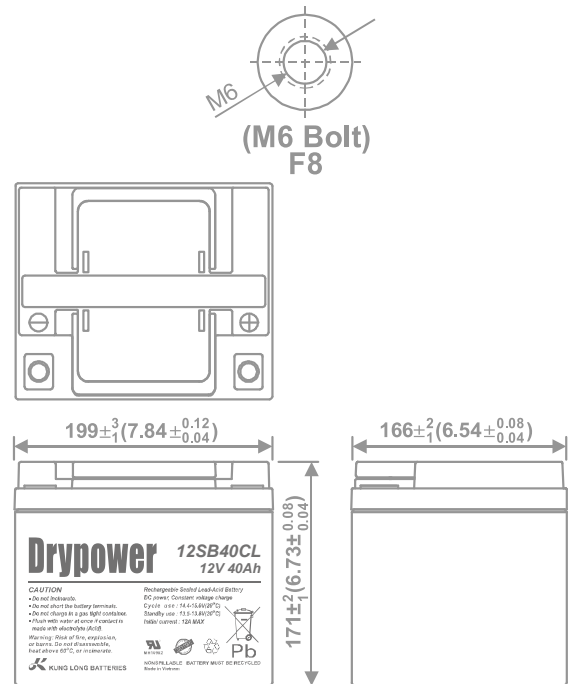
Case Material ABS

Terminal F8

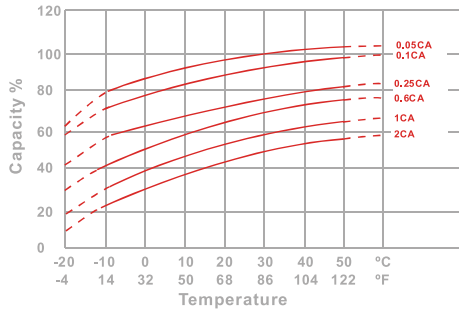


#### DIMENSIONS

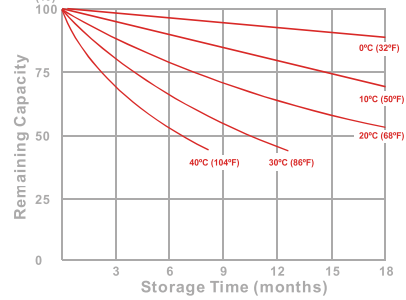
mm (inch)



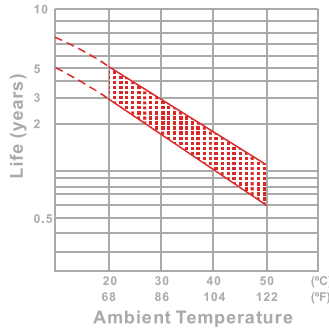
**Effect of Temperature on Capacity 25°C (77°F)**



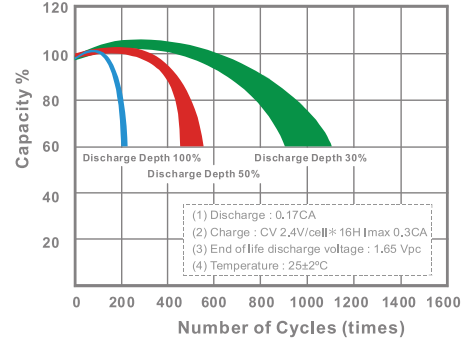
**Capacity Retention Characteristic**



**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	1243	1509	1701	1825	1857	1893	1928
10	min	741	914	1038	1117	1136	1160	1183
15	min	617	734	815	867	881	896	918
30	min	354	416	459	487	494	502	510
60	min	263	272	279	284	286	288	291
120	min	155	161	164	167	168	170	172
180	min	113	117	120	122	123	124	126
240	min	89.1	91.6	93.4	95.0	95.5	96.1	97.2
300	min	81.4	83.6	85.2	86.6	87.2	87.8	88.7
600	min	41.6	42.9	44.1	45.3	45.8	46.4	47.2
1200	min	21.3	22.5	23.6	24.5	24.9	25.4	26.1

**- 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	116	140	157	168	171	174	178
10	min	74.1	89.0	99.2	105	107	109	111
15	min	56.5	66.4	73.3	77.8	79.1	80.2	81.4
30	min	30.7	34.9	38.7	40.0	40.9	42.2	42.9
60	min	22.7	23.4	23.8	24.2	24.4	24.6	24.9
120	min	12.6	13.1	13.5	13.8	13.9	14.1	14.3
180	min	9.27	9.62	9.84	10.0	10.1	10.20	10.4
240	min	7.34	7.63	7.88	8.06	8.09	8.13	8.21
300	min	6.43	6.68	6.84	6.98	7.02	7.05	7.13
600	min	3.52	3.70	3.87	3.98	4.02	4.07	4.12
1200	min	1.87	1.95	2.03	2.07	2.09	2.12	2.14

**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.