

### 12SB30C (12V 30Ah)

#### SPECIFICATIONS

Nominal Voltage (V) 12V

#### Nominal Capacity

20 hour rate (1.50A to 10.50V)	30Ah
10 hour rate (2.85A to 10.50V)	28.5Ah
5 hour rate (5.10A to 10.20V)	25.5Ah
1C (30A to 9.60V)	19Ah
3C (90A to 9.60V)	12Ah

Weight Approx. 10.1kg (22.26lbs)

Internal Resistance (@1kHz) Approx. 9mΩ

Maximum Discharge Current  
For 5 seconds 450A

#### Charging Methods @25°C (77°F)

**Cycle Use:**  
Charging Voltage 14.4V to 15.0V  
Coefficient -5.0mV/°C/Cell  
Maximum Charging Current 9A

**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

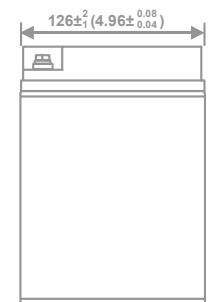
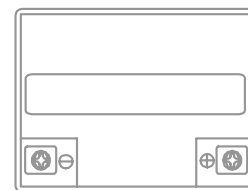
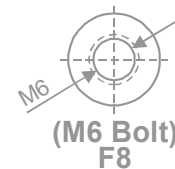
#### Description of Torque Value of Hard Ware for the Terminals

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

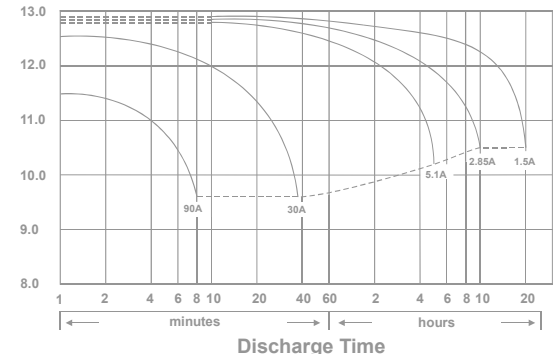


#### DIMENSIONS

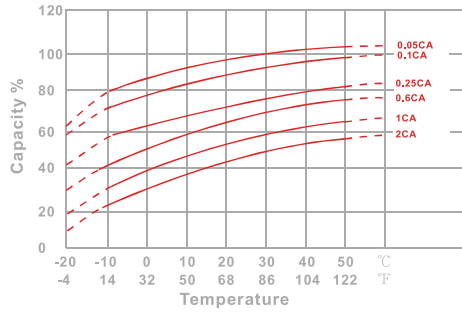
mm (inch)



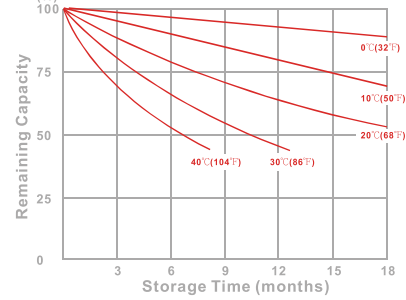
(v) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



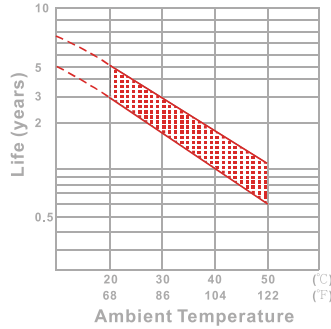
**Effect of Temperature on Capacity 25°C(77°F)**



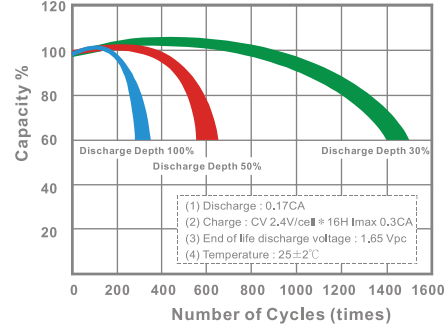
**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**Cycle Service Life**



**- PERFORMANCE DATA**

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
<b>Time</b>								
5	min	826	1042	1164	1232	1255	1276	1305
10	min	633	729	792	838	861	877	901
15	min	555	618	646	673	680	688	699
30	min	343	371	382	391	393	396	400
60	min	206	222	231	237	239	242	245
120	min	122	130	135	139	140	142	144
180	min	92.7	96.3	98.5	100	101	102	103
240	min	76.2	79.5	80.8	81.9	82.4	82.9	83.8
300	min	62.5	65.4	66.5	67.4	67.8	68.3	69.0
600	min	34.8	36.1	37.0	37.8	38.0	38.3	38.7
1200	min	18.8	19.5	20.0	20.3	20.4	20.6	20.8

**- 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
<b>Time</b>								
5	min	73.8	94.8	108	116	119	122	125
10	min	55.3	64.2	70.4	75.5	77.2	79.4	81.7
15	min	47.6	53.3	56.0	58.5	59.4	60.2	61.4
30	min	29.3	31.8	32.9	33.8	34.1	34.5	35.1
60	min	16.9	18.3	19.2	19.8	20.0	20.2	20.4
120	min	10.4	10.9	11.3	11.6	11.7	11.8	11.9
180	min	7.51	7.83	8.04	8.21	8.28	8.35	8.46
240	min	6.12	6.41	6.54	6.66	6.70	6.74	6.81
300	min	5.09	5.34	5.46	5.55	5.59	5.63	5.68
600	min	2.81	2.92	3.00	3.06	3.08	3.11	3.14
1200	min	1.52	1.57	1.61	1.64	1.65	1.67	1.69

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.