

12SB110CLS-FR (12V 111Ah)

SPECIFICATIONS

Nominal Voltage (V) 12V

Nominal Capacity

20 hour rate (5.57A to 9.90V)	111.4Ah
10 hour rate (10.6A to 9.90V)	106.0Ah
5 hour rate (18.1A to 9.60V)	90.5Ah
1 hour rate (64.9A to 9.60V)	64.9Ah

Weight Approx. 30.5kg (67.1lbs)

Internal Resistance (@1kHz) Approx. 5mΩ

Maximum Discharge Current

For 5 seconds 1200A

Charging Methods @25°C (77°F)

Cycle Use:

Charging Voltage 14.4V to 15.0V

Coefficient -5.0mV/°C/Cell

Maximum Charging Current 30A

Standby Use:

Float Charging Voltage 13.50V to 13.80V

Coefficient -3.0mV/°C/Cell

Design Life 12 years

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%

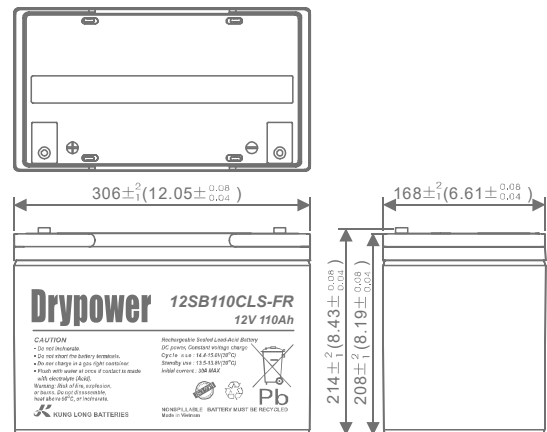
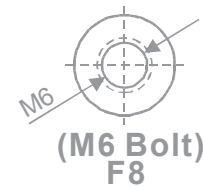
Case Material UL94-V0 Flame Retardant

Terminal F8

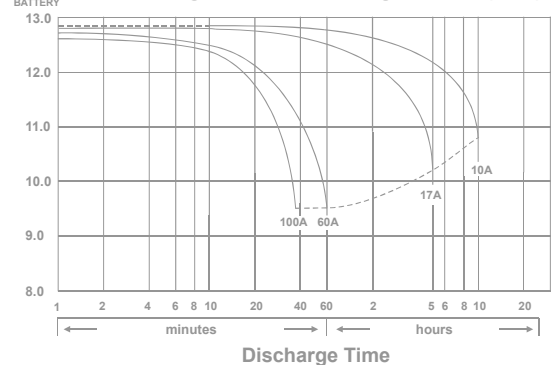


DIMENSIONS

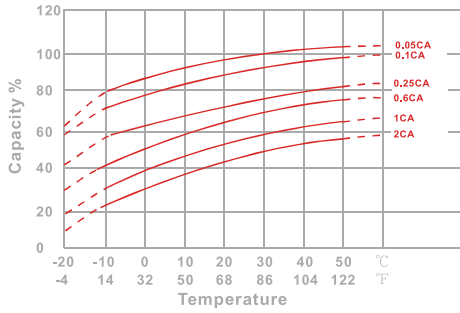
mm (inch)



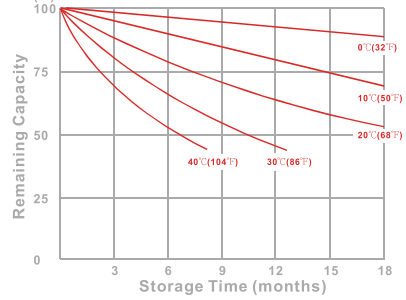
Discharge Time VS. Discharge Current (25°C)



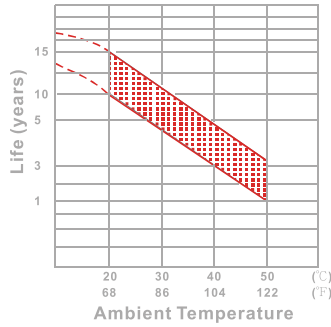
Effect of Temperature on Capacity 25°C(77°F)



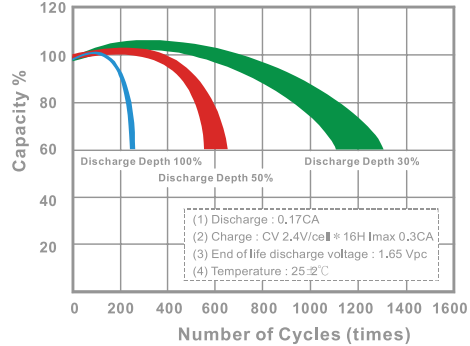
Capacity Retention Characteristic



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
Time								
5	min	2749	3071	3292	3503	3600	3702	3894
10	min	2087	2281	2440	2592	2657	2731	2862
15	min	1660	1807	1919	2027	2075	2126	2217
30	min	977	1041	1095	1146	1167	1194	1236
60	min	669	696	714	731	738	747	758
120	min	398	417	432	441	447	454	463
180	min	283	298	311	313	318	324	331
240	min	211	224	236	248	252	257	263
300	min	188	197	205	211	213	216	220
600	min	108	115	120	125	127	129	131
1200	min	62.1	64.3	66.0	67.2	67.7	68.3	69.1

- 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
Time								
5	min	202	267	305	336	346	358	375
10	min	159	188	209	226	234	243	257
15	min	119	146	165	179	184	190	198
30	min	71.2	83.7	92.1	101	103	106	111
60	min	43.6	50.8	56.5	60.6	61.5	63.0	64.9
120	min	25.8	29.3	32.5	35.6	36.4	37.3	38.5
180	min	22.6	23.7	24.8	25.7	26.1	26.5	27.2
240	min	18.3	19.1	19.8	20.5	20.8	21.1	21.6
300	min	16.1	16.7	17.2	17.6	17.8	17.9	18.1
600	min	9.71	10.0	10.2	10.4	10.5	10.6	10.7
1200	min	5.09	5.26	5.38	5.48	5.53	5.57	5.64

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.