

12SB7P

12Volt 7Ah

Specifications

Nominal Voltage(V) **12V**

Nominal Capacity

10 min rate	(219W to 9.60V)	36.5Wh
20 hour rate	(0.35A to 10.50V)	7Ah
1 C	(7A to 9.60V)	4.43Ah
3 C	(21A to 9.60V)	2.8Ah

Weight **Approx. 2.2kg(4.84Lbs.)**

Internal Resistance (at 1KHz) **Approx. 17 mΩ**

Maximum Discharge Current for

5 seconds: **105A**

Charging Methods at 25°C (77°F)

Cycle use: N/A

Charging Voltage

Coefficient $-5.0\text{mV}/^{\circ}\text{C}/\text{cell}$

Maximum Charging Current : **2.1A**

Standby use:

Float Charging Voltage **13.50 to 13.80V**

Coefficient $-3.0\text{mV}/^{\circ}\text{C}/\text{cell}$

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) at 20°C (68°F)

1 month **92%**

3 month **90%**

6 month **80%**

Case Material **ABS**

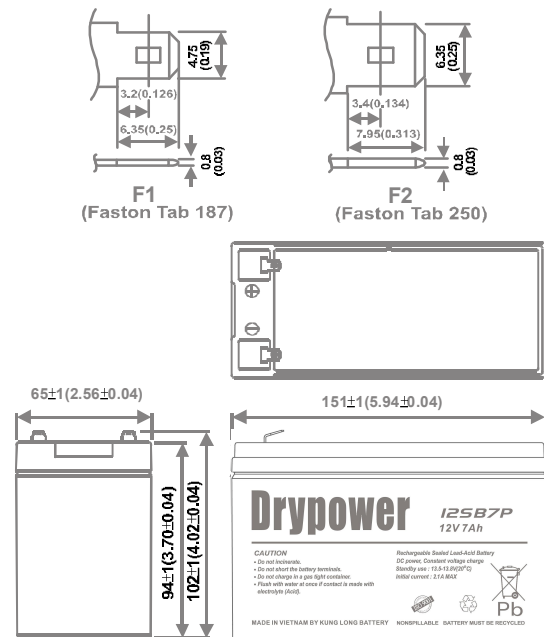
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal **F1 or F2 (Faston Tab 187 or 250)**

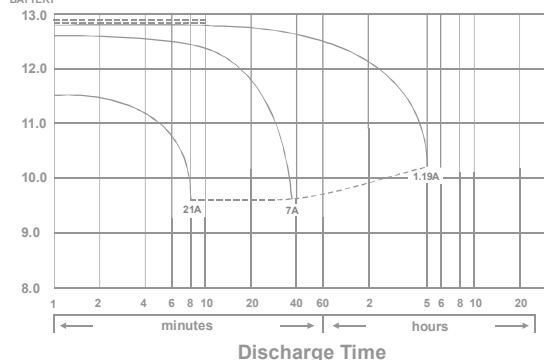


Dimensions

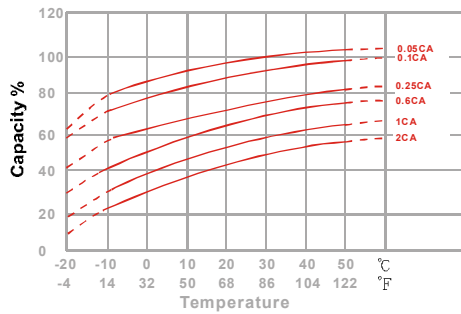
mm(inch)



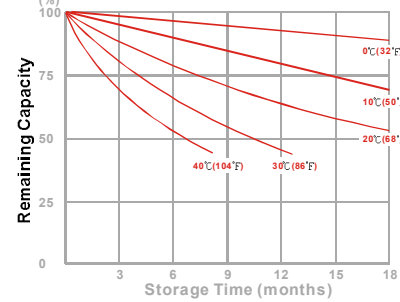
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



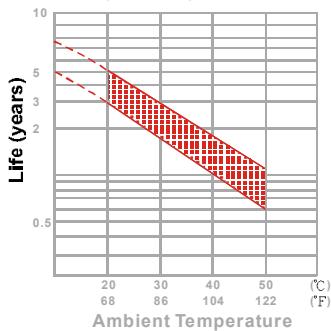
Effect of Temperature on Capacity 25°C(77°F)



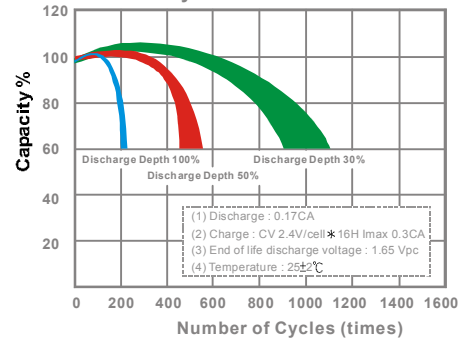
Capacity Retention Characteristic



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
Time								
5	min	263	282	294	306	311	317	326
10	min	180	191	199	206	209	213	219
15	min	144	151	155	159	161	164	168
30	min	72.4	77.6	81.5	84.6	85.5	86.4	87.5
60	min	46.2	50.3	51.8	53.2	53.8	54.5	55.4
120	min	24.6	27.1	28.3	29.5	29.9	30.4	31.2
180	min	18.5	19.9	20.9	21.7	22.0	22.3	22.8
240	min	17.1	17.6	18.0	18.3	18.4	18.6	18.9
300	min	14.8	15.2	15.5	15.7	15.8	15.9	16.1
600	min	8.16	8.39	8.51	8.59	8.62	8.66	8.72
1200	min	4.14	4.23	4.31	4.37	4.39	4.42	4.46

- 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	23.1	26.2	27.8	29.1	29.6	30.5	31.7
10	min	16.1	17.3	18.1	18.6	18.9	19.2	19.8
15	min	12.6	13.1	13.5	13.8	14.0	14.1	14.3
30	min	6.54	7.05	7.28	7.47	7.56	7.68	7.85
60	min	4.02	4.25	4.41	4.52	4.58	4.63	4.71
120	min	2.26	2.38	2.45	2.49	2.51	2.54	2.57
180	min	1.65	1.74	1.79	1.82	1.83	1.85	1.88
240	min	1.39	1.44	1.48	1.51	1.53	1.55	1.57
300	min	1.13	1.19	1.24	1.28	1.30	1.31	1.32
600	min	0.667	0.675	0.682	0.687	0.690	0.694	0.699
1200	min	0.339	0.346	0.350	0.353	0.355	0.357	0.359

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%)