

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(0.11A to 10.50V)	2.2Ah
10 hour rate	(0.209A to 10.50V)	2.09Ah
5 hour rate	(0.374A to 10.20V)	1.87Ah
1 C	(2.2A to 9.60V)	1.25Ah
3 C	(6.6A to 9.60V)	0.88Ah

#### Weight

Approx. 1.04kg(2.29Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 37 mΩ

#### Maximum Discharge Current for

5 seconds: 33A

#### Charging Methods at 25°C(77°F)

Cycle use:	
Charging Voltage	14.4 to 15.0V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current :	0.66A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
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) at 20°C(68°F)

1 month	92%
3 month	90%
6 month	80%

#### Case Material

ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

3-5 Years.

#### Terminal

F1 or F2 (Faston Tab 187 or 250)



### ⚡ Dimensions

#### Length (L)

178±1 (7.01±0.04)

#### Width (W)

34±1 (1.34±0.04)

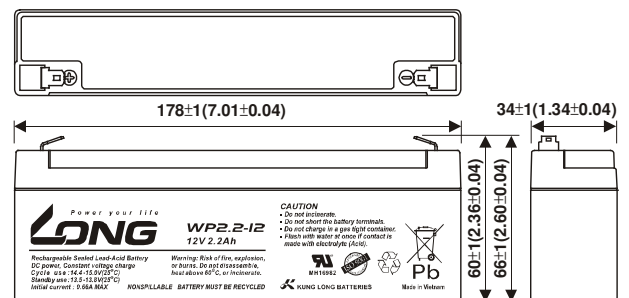
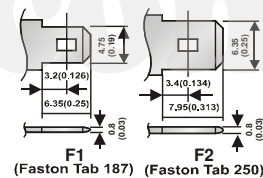
#### Height (H)

60±1 (2.36±0.04)

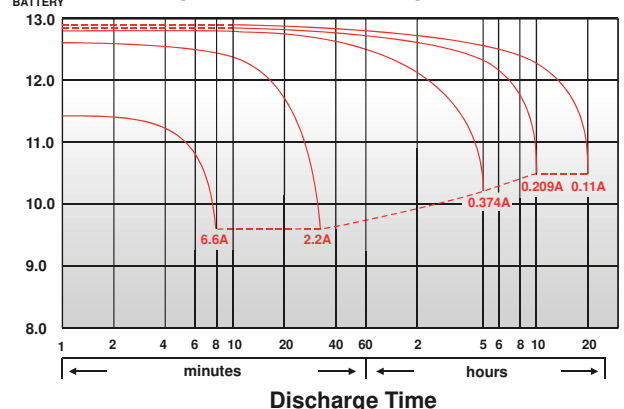
#### Overall Height (HT)

66±1 (2.60±0.04)

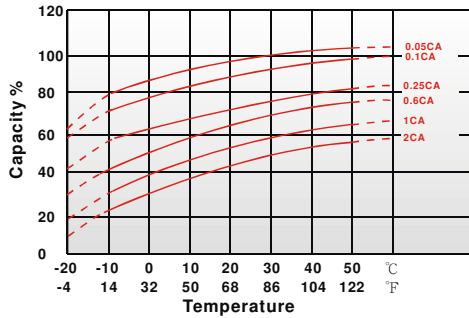
mm(inch)



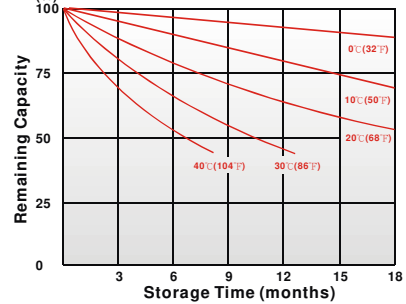
#### (V) Discharge Time VS. Discharge Current (25°C)



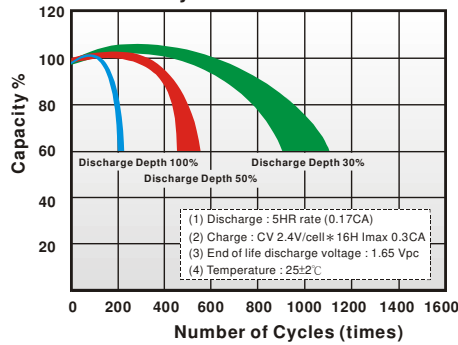
**Effect of Temperature on Capacity 25°C(77°F)**



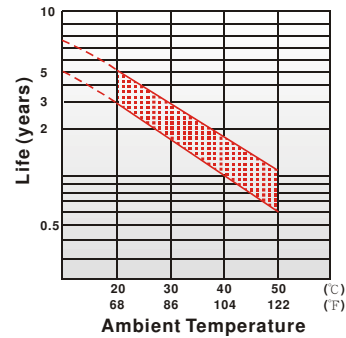
**Capacity Retention Characteristic**



**Cycle Service Life**



**Trickle (or float) 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	11.2	13.6	14.7	15.2	15.5	15.7	16.1
10	min	7.70	9.32	10.0	10.5	10.7	10.8	10.9
15	min	6.72	7.46	7.70	7.90	7.97	8.01	8.10
30	min	3.60	3.88	4.02	4.13	4.15	4.21	4.27
60	min	2.25	2.43	2.59	2.66	2.68	2.71	2.74
120	min	1.35	1.46	1.53	1.59	1.61	1.64	1.68
180	min	1.01	1.11	1.15	1.19	1.20	1.22	1.25
240	min	0.824	0.892	0.932	0.962	0.973	0.985	0.995
300	min	0.688	0.765	0.787	0.802	0.807	0.813	0.820
600	min	0.405	0.442	0.455	0.463	0.467	0.470	0.473
1200	min	0.220	0.230	0.237	0.242	0.244	0.245	0.246

**- 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	7.24	7.85	8.36	8.79	8.99	9.16	9.45
10	min	4.55	5.10	5.39	5.61	5.68	5.77	5.88
15	min	3.64	3.88	4.05	4.18	4.23	4.27	4.33
30	min	1.85	2.04	2.13	2.20	2.22	2.25	2.29
60	min	1.18	1.27	1.32	1.36	1.37	1.39	1.41
120	min	0.655	0.718	0.752	0.783	0.796	0.813	0.836
180	min	0.486	0.538	0.561	0.583	0.591	0.601	0.615
240	min	0.393	0.429	0.451	0.470	0.475	0.483	0.491
300	min	0.351	0.369	0.382	0.390	0.394	0.399	0.404
600	min	0.208	0.216	0.222	0.227	0.228	0.230	0.232
1200	min	0.109	0.113	0.116	0.118	0.119	0.120	0.121

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%)

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