

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(0.2A	to	10.50V)	4Ah
10 hour rate	(0.38A	to	10.50V)	3.8Ah
5 hour rate	(0.68A	to	10.20V)	3.4Ah
1 C	(4A	to	9.60V)	2.13Ah
3 C	(12A	to	9.60V)	1.4Ah

#### Weight

Approx. 1.5kg(3.3Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 39 mΩ

#### Maximum Discharge Current for

5 seconds: 60A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	1.2A
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	97%
3 month	92%
6 month	85%

#### Case Material

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

#### Design Life

3-5 Years.

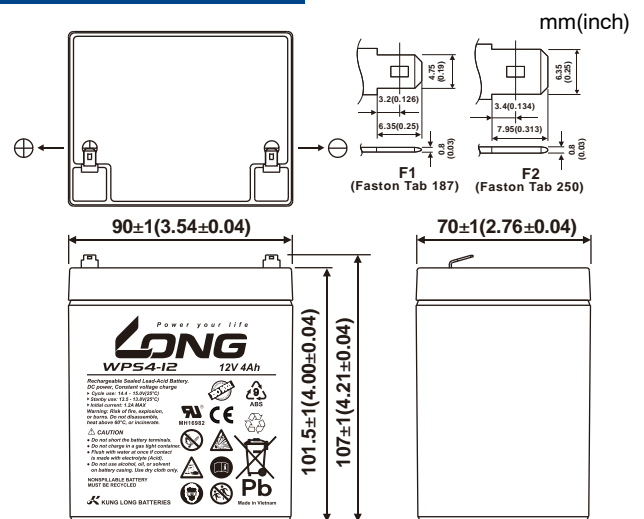
#### Terminal

F1 or F2 (Faston Tab 187 or 250)

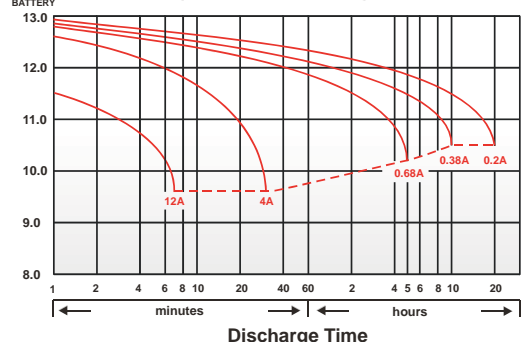


### ⚡ Dimensions

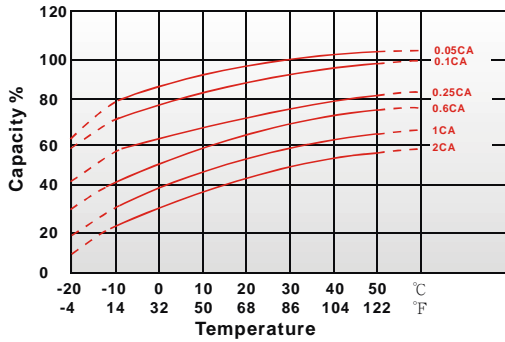
Length (L)	90±1 (3.54±0.04)
Width (W)	70±1 (2.76±0.04)
Height (H)	101.5±1 (4.00±0.04)
Overall Height (HT)	107±1 (4.21±0.04)



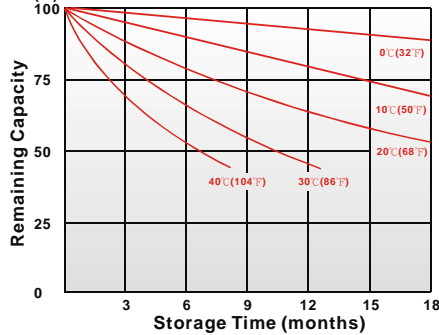
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



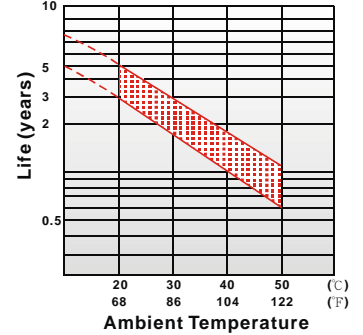
**Effect of Temperature on Capacity 25°C (77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**- 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	22.7	25.7	27.8	29.8	30.7	31.7	32.8
10	min	16.4	18.7	20.0	21.0	21.3	21.8	22.3
15	min	13.3	14.8	15.4	15.8	16.0	16.1	16.3
30	min	7.78	8.73	9.08	9.43	9.53	9.65	9.77
60	min	4.38	4.95	5.32	5.62	5.68	5.78	5.87
120	min	2.70	2.97	3.10	3.20	3.25	3.32	3.38
180	min	2.12	2.30	2.40	2.47	2.50	2.55	2.60
240	min	1.72	1.85	1.93	1.98	2.02	2.03	2.07
300	min	1.53	1.64	1.68	1.72	1.73	1.75	1.78
600	min	0.950	1.01	1.03	1.05	1.07	1.09	1.10
1200	min	0.490	0.518	0.538	0.552	0.555	0.562	0.568

**- 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	14.9	17.0	18.3	18.8	19.0	19.2	19.4
10	min	10.0	11.3	11.6	11.8	11.9	12.0	12.1
15	min	7.21	7.83	8.31	8.53	8.58	8.65	8.74
30	min	4.36	4.82	4.97	5.11	5.15	5.21	5.26
60	min	2.53	2.78	2.89	2.97	2.99	3.02	3.05
120	min	1.42	1.54	1.62	1.65	1.66	1.67	1.69
180	min	1.14	1.21	1.23	1.25	1.26	1.27	1.28
240	min	0.889	0.948	0.973	0.996	1.00	1.01	1.02
300	min	0.808	0.839	0.852	0.863	0.867	0.872	0.878
600	min	0.458	0.480	0.495	0.503	0.507	0.511	0.515
1200	min	0.231	0.245	0.257	0.265	0.268	0.272	0.276

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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