

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

20 hour rate	(0.6A	to	10.50V)	12Ah
10 hour rate	(1.14A	to	10.50V)	11.4Ah
5 hour rate	(2.04A	to	10.20V)	10.2Ah
1 C	(12A	to	9.60V)	6.4Ah
3 C	(36A	to	9.60V)	4.2Ah

#### Weight

Approx. 3.68kg(8.1Lbs.)

#### Internal Resistance (at 1KHz)

Approx. 13 mΩ

#### Maximum Discharge Current for

5 seconds: 180A

#### Charging Methods at 25°C(77°F)

Maximum Charging Current :	3.6A
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

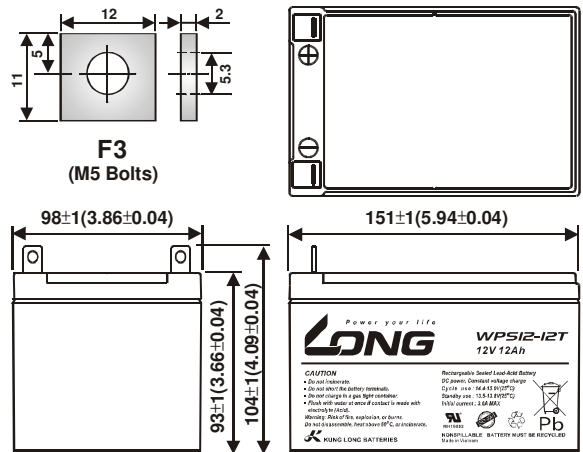
F3



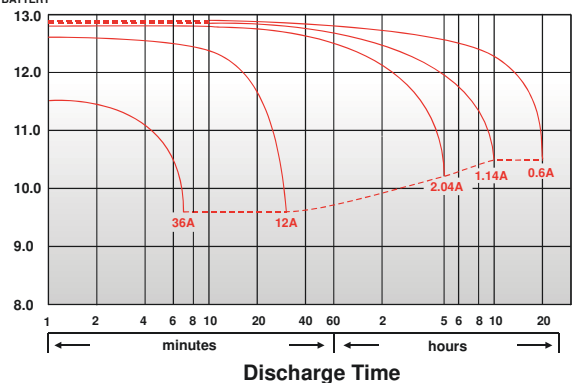
### ⚡ Dimensions

Length (L)	151±1 (5.94±0.04)
Width (W)	98±1 (3.86±0.04)
Height (H)	93±1 (3.66±0.04)
Overall Height (HT)	104±1 (4.09±0.04)

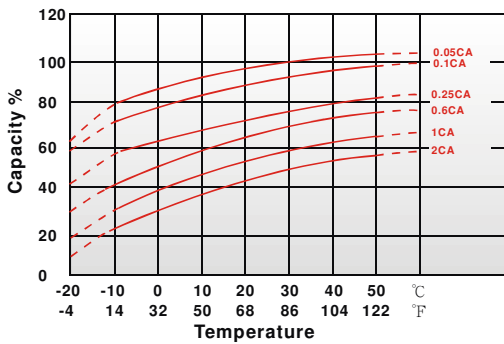
mm(inch)



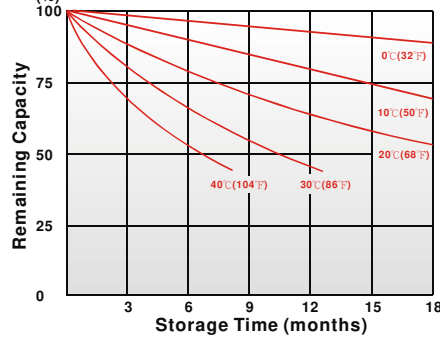
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



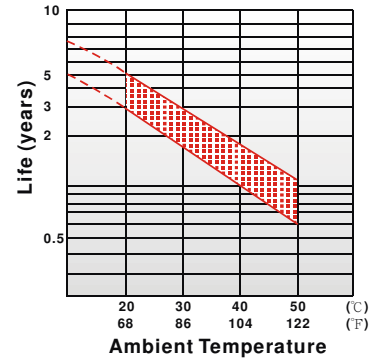
**Effect of Temperature on Capacity 25°C(77°F)**



**Capacity Retention Characteristic**



**Trickle (or float) Service Life**



**- 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	67.6	75.2	80.8	86.7	89.3	91.9	97.0
10	min	48.0	52.5	54.9	57.3	58.2	59.5	61.0
15	min	38.6	41.0	42.6	44.1	44.5	45.4	46.6
30	min	22.2	23.6	24.6	25.4	25.7	25.9	26.3
60	min	15.8	16.3	16.7	17.0	17.2	17.3	17.5
120	min	8.63	8.92	9.04	9.14	9.18	9.24	9.32
180	min	5.65	5.87	6.05	6.20	6.27	6.35	6.42
240	min	4.78	4.88	4.96	5.06	5.12	5.20	5.26
300	min	3.96	4.08	4.18	4.30	4.33	4.38	4.48
600	min	2.34	2.40	2.44	2.47	2.48	2.50	2.52
1200	min	1.19	1.21	1.25	1.26	1.28	1.29	1.32

**- 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	37.2	41.4	44.5	47.7	49.1	50.6	53.4
10	min	25.7	28.1	29.4	30.7	31.2	31.9	32.7
15	min	19.8	21.3	22.1	22.9	23.2	23.5	24.2
30	min	11.4	12.1	12.6	13.0	13.1	13.3	13.5
60	min	8.21	8.40	8.52	8.63	8.68	8.74	8.82
120	min	4.21	4.36	4.47	4.56	4.59	4.63	4.68
180	min	2.87	3.06	3.13	3.19	3.22	3.25	3.29
240	min	2.38	2.43	2.47	2.52	2.55	2.58	2.62
300	min	1.97	2.03	2.08	2.14	2.16	2.19	2.23
600	min	1.16	1.18	1.20	1.22	1.23	1.24	1.25
1200	min	0.592	0.599	0.618	0.627	0.634	0.642	0.656

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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