

## WP1224W 12Volt 24W

### Specifications

Nominal Voltage(V) **12V**

#### Nominal Capacity

15 min rate	(144W to 9.60V)	<b>36Wh</b>
20 hour rate	(0.3A to 10.50V)	<b>6Ah</b>
10 hour rate	(0.57A to 10.50V)	<b>5.7Ah</b>
5 hour rate	(1.02A to 10.20V)	<b>5.1Ah</b>
1 C	(6A to 9.60V)	<b>3.8Ah</b>
3 C	(18A to 9.60V)	<b>2.4Ah</b>

Weight **Approx. 1.93kg(4.25Lbs.)**

Internal Resistance (at 1KHz) **Approx. 16 mΩ**

#### Maximum Discharge Current for

5 seconds: **90A**

#### Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage **14.4 to 15.0V**

Coefficient **-5.0mV/°C/cell**

Maximum Charging Current : **1.8A**

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**

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

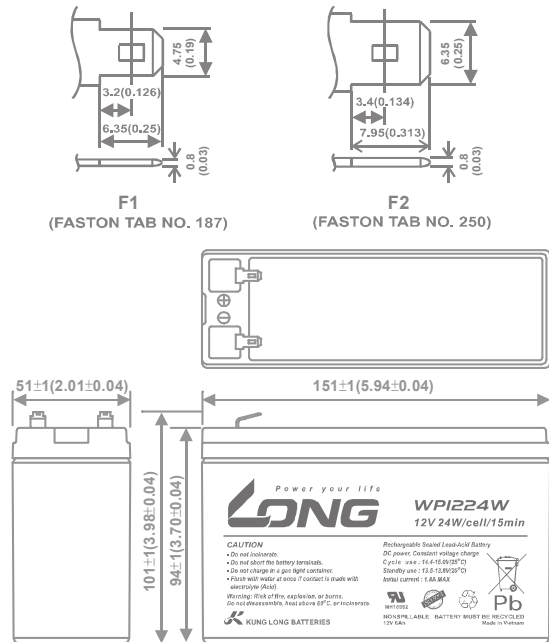
#### Terminal

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

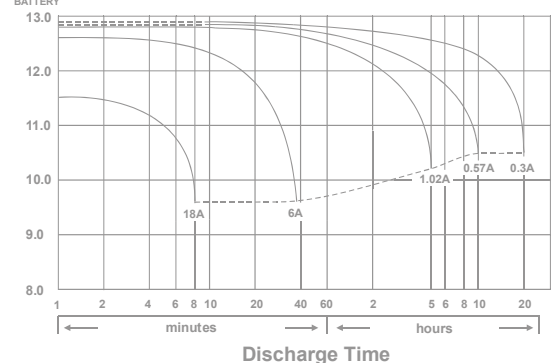


### Dimensions

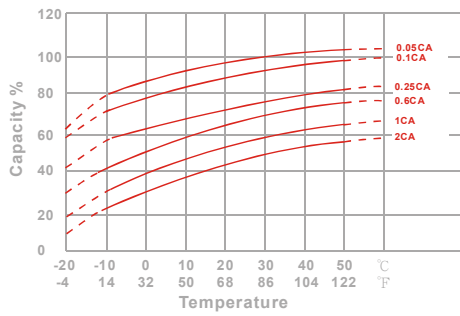
mm(inch)



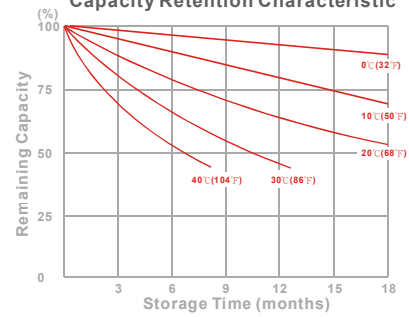
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



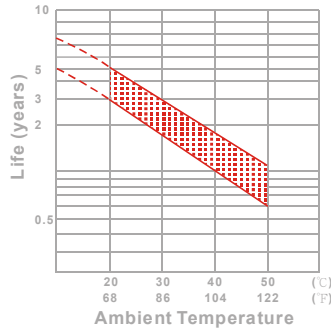
Effect of Temperature on Capacity 25°C(77°F)



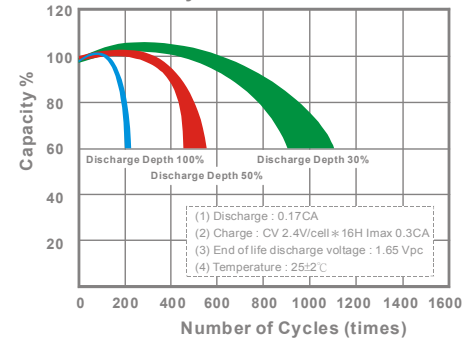
Capacity Retention Characteristic



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	227	262	284	302	308	315	324
8	min	168	195	214	228	234	239	246
10	min	154	175	188	198	203	206	212
15	min	122	134	143	150	152	155	158
20	min	97.5	106	114	120	121	123	125
30	min	79.8	85.5	88.6	91.4	92.6	93.8	95.6
60	min	43.2	46.4	48.2	49.8	50.3	50.9	51.8
120	min	26.4	27.9	29.2	30.1	30.4	30.8	31.3
300	min	12.1	12.8	13.3	13.7	13.8	14.0	14.2
600	min	7.58	7.72	7.81	7.88	7.90	7.93	7.97
1200	min	4.13	4.20	4.25	4.30	4.32	4.34	4.36

## - 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	19.1	22.6	24.9	27.0	27.7	28.6	29.8
8	min	17.0	18.8	19.9	20.8	21.1	21.5	22.1
10	min	14.2	15.7	16.8	17.7	18.0	18.4	19.0
15	min	11.3	12.2	12.9	13.4	13.6	13.7	13.9
20	min	9.71	10.2	10.3	10.7	10.9	11.0	11.2
30	min	6.78	7.19	7.46	7.69	7.78	7.90	8.07
60	min	3.63	3.85	4.00	4.13	4.19	4.24	4.32
120	min	1.88	2.01	2.12	2.21	2.25	2.29	2.34
300	min	0.961	1.032	1.071	1.097	1.108	1.12	1.13
600	min	0.593	0.612	0.619	0.626	0.628	0.631	0.636
1200	min	0.319	0.327	0.332	0.337	0.339	0.341	0.343

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%)