

WP4-12 12Volt 4Ah

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)	2.27Ah
3 C	(12A	to	9.60V)	1.6Ah

Weight Approx. 1.63kg(3.59Lbs.)

Internal Resistance (at 1KHz) Approx. 35 mΩ

Maximum Discharge Current for

5 seconds: 80A

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 1.2A

Standby use:

Float Charging Voltage 13.50 to 13.80V

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	98%
3 month	94%
6 month	85%

Case Material ABS

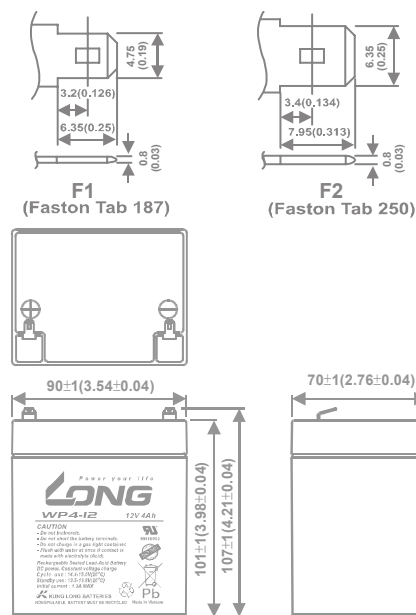
(Option: UL94 HB & UL94 V-0 flame retardant)

Terminal F1 or F2 (Faston Tab 187 or 250)

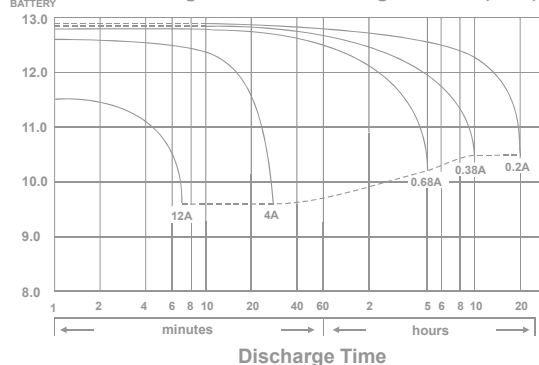


Dimensions

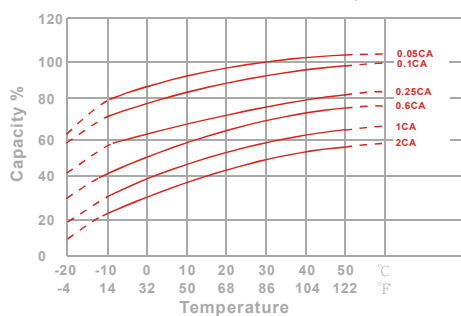
mm(inch)



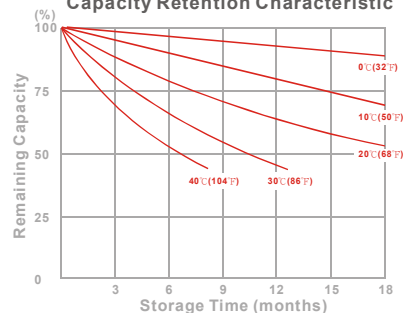
(V) FOR 12V BATTERY Discharge Time VS. Discharge Current (25°C)



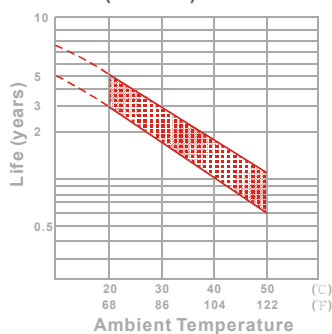
Effect of Temperature on Capacity 25°C(77°F)



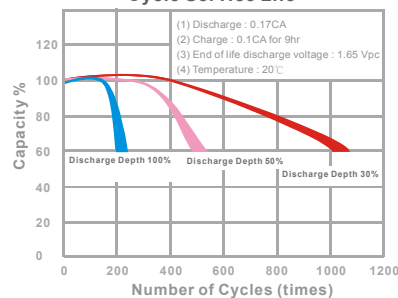
Capacity Retention Characteristic



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		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	154	172	182	187	189	190
10	min	98.2	109	116	119	120	121
15	min	76.2	83.8	88.2	90.3	91.4	92.0
30	min	41.0	45.1	47.5	48.7	49.2	49.6
60	min	25.7	27.8	29.3	30.0	30.3	30.7
120	min	13.6	14.7	15.4	15.8	16.0	16.2
180	min	10.8	11.7	12.3	12.6	12.8	12.9
240	min	8.68	9.40	9.88	10.1	10.2	10.4
300	min	7.37	7.99	8.40	8.60	8.71	8.81
600	min	4.36	4.72	4.96	5.08	5.14	5.20
1200	min	2.29	2.48	2.60	2.67	2.70	2.73

- Discharge Rates in Amperes to Various End Voltages at 25°C(77°F)

End Voltage		11.10V	10.80V	10.50V	10.20V	9.90V	9.60V
Time							
5	min	14.0	15.6	16.5	17.0	17.2	17.3
10	min	8.77	9.75	10.3	10.6	10.7	10.8
15	min	6.62	7.29	7.67	7.86	7.94	8.00
30	min	3.48	3.82	4.03	4.12	4.17	4.20
60	min	2.16	2.34	2.46	2.52	2.55	2.58
120	min	1.13	1.23	1.29	1.32	1.34	1.35
180	min	0.90	0.98	1.03	1.05	1.06	1.08
240	min	0.72	0.78	0.82	0.84	0.85	0.86
300	min	0.61	0.66	0.70	0.71	0.72	0.73
600	min	0.36	0.39	0.41	0.42	0.43	0.43
1200	min	0.19	0.20	0.22	0.22	0.22	0.23

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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