

# RECHARGEABLE SEALED LEAD ACID BATTERY

# SPECIFICATION



## MP7,2-12B

**Nominal Voltage(V)** 12V

**Nominal Capacity**

20 hour rate	(0.36A to 10.50V)	7.2Ah
10 hour rate	(0.684A to 10.50V)	6.84Ah
5 hour rate	(1.224A to 10.20V)	6.12Ah
1 C	(7.2A to 9.60V)	4.08Ah
3 C	(21.6A to 9.60V)	2.88Ah

**Weight Approx.** 2.4kg(5.28Lbs.)

**Internal Resistance (at 1KHz) Approx.** 22 mΩ

**Maximum Discharge Current for 5 seconds:** 108A

**Charging Methods at 25°C(77°F)**

<b>Cycle use:</b>	
Charging Voltage	14.7 to 14.8V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current:	2.16A
<b>Standby use:</b>	
Float Charging Voltage	13.50 to 13.80V
Coefficient	-3.0mV/°C/cell

**Operating Temperature Range**

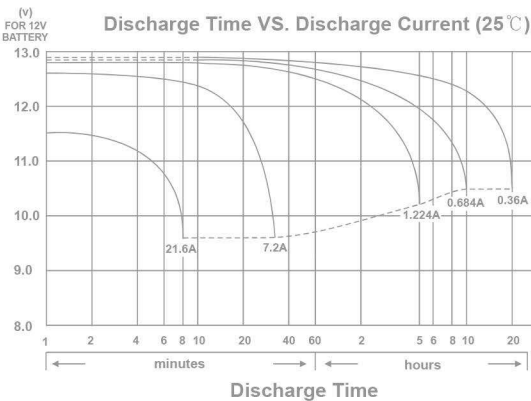
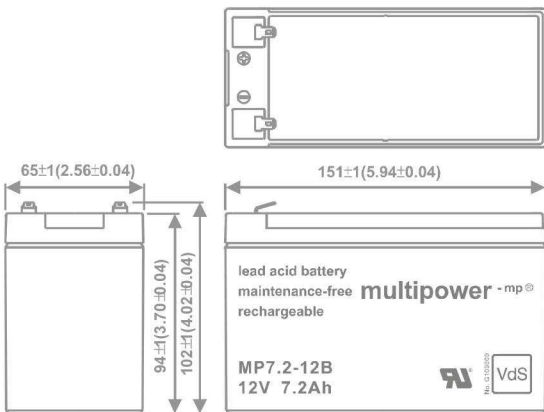
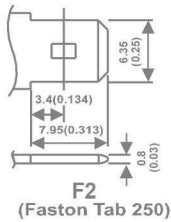
Charge	-15°C(5°F) to 40°C(104°F)
Discharge	-15°C(5°F) to 50°C(122°F)
Storage	-15°C(5°F) to 40°C(104°F)

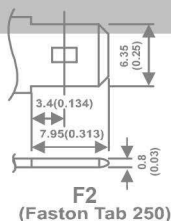
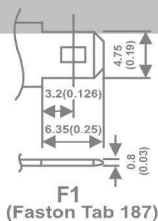
**Charge Retention (shelf life) at 20°C(68°F)**

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

**Case Material** ABS  
(UL94 HB flame retardant case / cover)

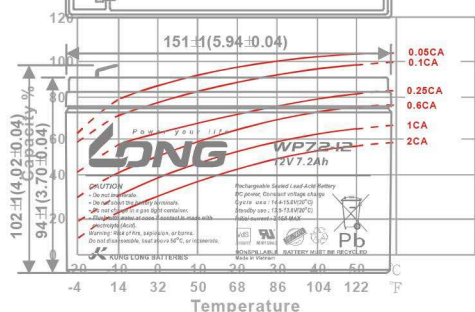
**Terminal** F2(Faston Tab 250)



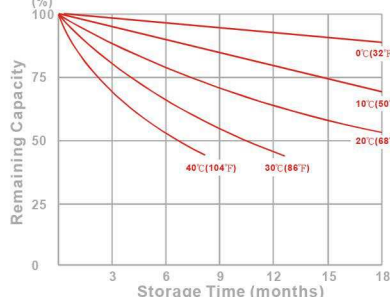


## CHARACTERISTIC & PERFORMANCE DATA

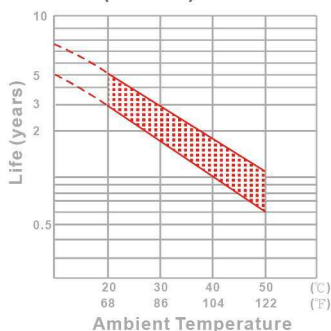
Effect of Temperature on Capacity 25°C (77°F)



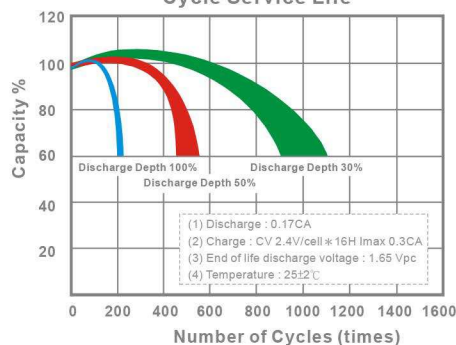
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



### - PERFORMANCE DATA

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

Time	End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
	min	max							
5	min	max	257	288	302	315	321	326	335
10	min	max	179	188	196	204	209	212	218
15	min	max	146	153	157	161	162	165	169
30	min	max	78.2	82.1	84.7	86.8	87.6	88.4	89.6
60	min	max	50.6	52.4	53.8	54.9	55.3	55.8	56.7
120	min	max	25.3	26.3	27.8	31.3	31.6	31.9	32.4
180	min	max	19.6	20.7	21.6	22.4	22.6	22.9	23.2
240	min	max	17.2	18.0	18.6	18.9	19.0	19.2	19.4
300	min	max	14.8	15.3	15.8	16.1	16.2	16.3	16.4
600	min	max	8.17	8.35	8.49	8.61	8.65	8.70	8.76
1200	min	max	4.16	4.31	4.42	4.50	4.53	4.56	4.62

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

Time	End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
	min	max							
5	min	max	23.5	26.4	28.1	29.7	30.5	31.3	32.6
10	min	max	16.2	17.0	18.2	18.6	18.8	19.1	19.8
15	min	max	12.5	13.1	13.6	13.9	14.0	14.2	14.5
30	min	max	6.61	6.92	7.14	7.30	7.38	7.45	7.61
60	min	max	3.98	4.13	4.25	4.36	4.39	4.42	4.48
120	min	max	2.05	2.14	2.21	2.27	2.29	2.32	2.35
180	min	max	1.63	1.69	1.75	1.80	1.82	1.84	1.87
240	min	max	1.30	1.37	1.42	1.45	1.46	1.47	1.49
300	min	max	1.11	1.16	1.23	1.25	1.26	1.27	1.28
600	min	max	0.650	0.680	0.721	0.728	0.732	0.737	0.747
1200	min	max	0.341	0.357	0.377	0.382	0.384	0.387	0.392

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%)