

**RECHARGEABLE SEALED LEAD ACID BATTERY**

**SPECIFICATION**

**MP1,2-12**



**Nominal Voltage(V)** 12V

**Nominal Capacity**

20 hour rate	(0.06A to 10.50V)	1.2Ah
10 hour rate	(0.114A to 10.50V)	1.14Ah
5 hour rate	(0.204A to 10.20V)	1.02Ah
1 C	(1.2A to 9.60V)	0.68Ah
3 C	(3.6A to 9.60V)	0.48Ah

**Weight Approx.** 575g(1.27Lbs.)

**Internal Resistance (at 1KHz) Approx.** 75.4 mΩ

**Maximum Discharge Current for 5 seconds:** 18A

**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:	0.36A
<b>Standby use:</b>	
Float Charging Voltage	13.50 to 13.80V
Coefficient	-3.0mV/°C/cell

**Operating Temperature Range**

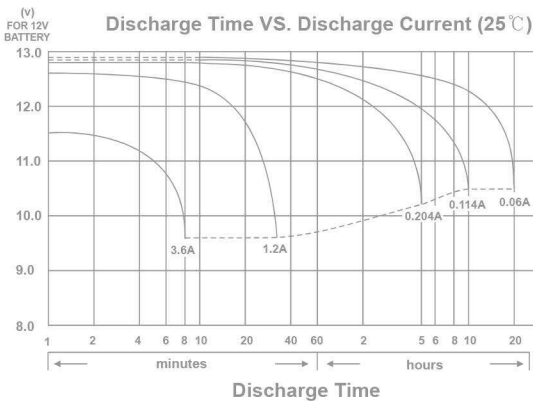
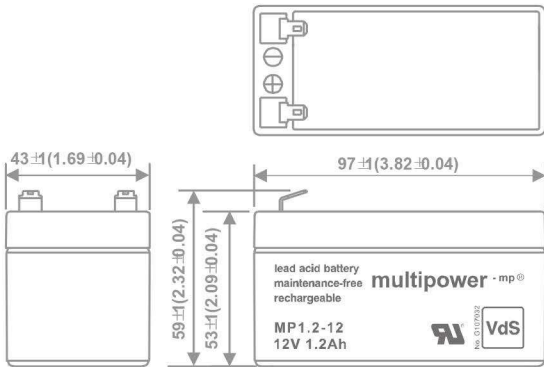
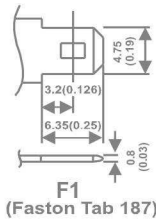
Charge	-15°C(5°F) to 40°C(104°F)
Discharge	-15°C(5°F) to 50°C(122°F)
Storage	-15°C(5°F) to 40°C(104°F)

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

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

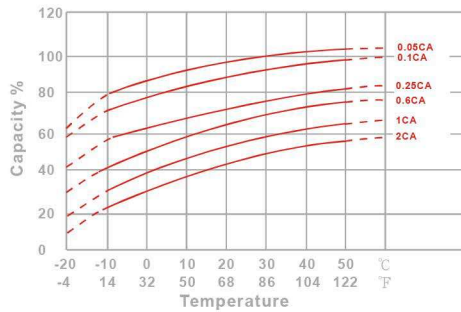
**Case Material** ABS  
(UL94 HB flame retardant case / cover)

**Terminal** F1(Faston Tab 187)

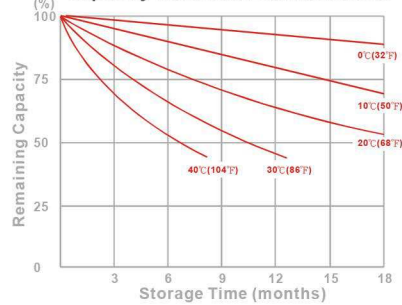


## CHARACTERISTIC & PERFORMANCE DATA

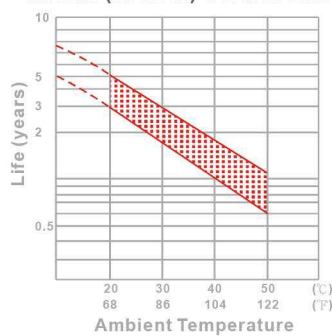
Effect of Temperature on Capacity 25°C(77°F)



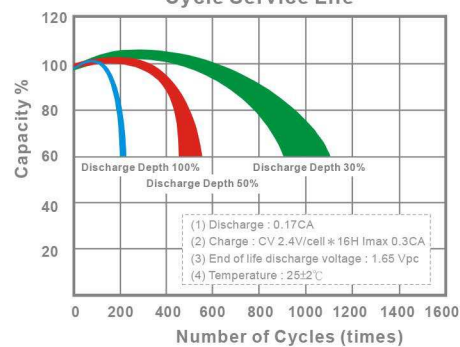
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



### - PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	43.1	46.9	49.6	51.9	52.8	53.9	55.7
10	min	27.7	30.0	31.8	33.1	33.5	34.0	34.6
15	min	21.9	23.2	24.3	25.2	25.5	25.9	26.3
30	min	12.9	13.5	13.9	14.2	14.3	14.5	14.7
60	min	7.91	8.35	8.59	8.80	8.88	8.98	9.10
120	min	4.48	4.85	5.08	5.25	5.32	5.40	5.49
180	min	3.20	3.44	3.61	3.74	3.80	3.87	3.94
240	min	2.61	2.82	2.97	3.08	3.12	3.17	3.22
300	min	2.52	2.65	2.74	2.81	2.83	2.86	2.89
600	min	1.32	1.40	1.46	1.50	1.51	1.53	1.55
1200	min	0.738	0.757	0.771	0.780	0.783	0.787	0.792

- 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
5	min	3.49	4.11	4.57	4.94	5.09	5.26	5.51
10	min	2.12	2.43	2.63	2.81	2.88	2.96	3.11
15	min	1.71	1.95	2.09	2.20	2.24	2.29	2.35
30	min	0.931	1.06	1.17	1.24	1.26	1.29	1.32
60	min	0.680	0.716	0.735	0.759	0.765	0.772	0.779
120	min	0.392	0.415	0.429	0.440	0.444	0.449	0.456
180	min	0.272	0.291	0.302	0.311	0.314	0.318	0.324
240	min	0.223	0.238	0.247	0.254	0.257	0.260	0.264
300	min	0.207	0.219	0.226	0.231	0.233	0.236	0.238
600	min	0.112	0.117	0.121	0.124	0.125	0.126	0.127
1200	min	0.0615	0.0624	0.0631	0.0637	0.0639	0.0642	0.0646

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%)