

## RECHARGEABLE SEALED LEAD ACID BATTERY

## SPECIFICATION

### MP3,4-12

**Nominal Voltage (V)** 12V

**Nominal Capacity**

20 hour rate	(0.160A to 5.4V)	3.20Ah
10 hour rate	(0.298A to 5.4V)	2.98Ah
5 hour rate	(0.538A to 5.25V)	2.69Ah
1 C	(3.2A to 4.8V)	1.71Ah
3 C	(9.6A to 4.8V)	1.12Ah

**Weight Approx.** 1.35kg (2.98lbs)

**Internal Resistance (at 1KHz) Approx.** 45 mΩ

**Maximum Discharge Current for 5 seconds:** 48.0A

**Charging Methods at 25°C (77°F)**

Cycle use:	
Charging Voltage	14.70V to 14.80V
Coefficient	-30.0mV/°C/cell
Maximum Charging Current:	0.96A
Standby use:	
Float Charging Voltage	13.50V to 13.80V
Coefficient	-20.0mV/°C/cell

**Operating Temperature Range**

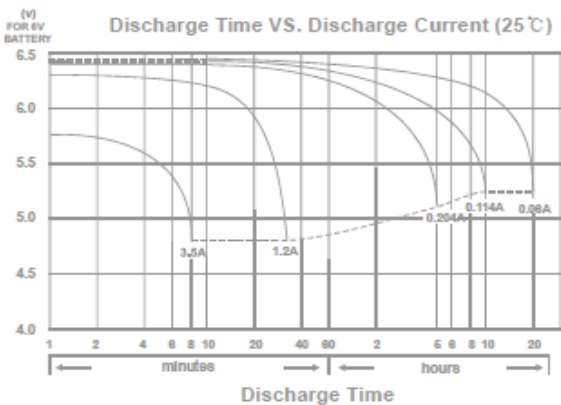
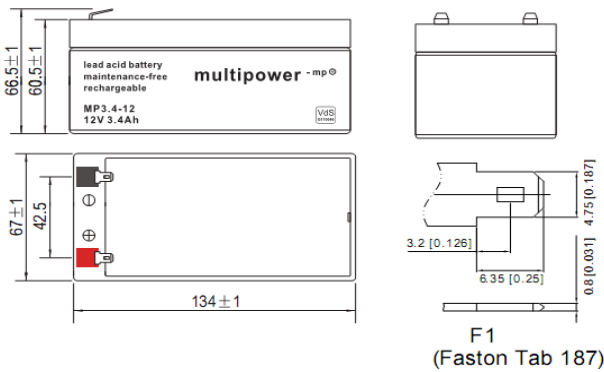
Charge	0°C (32°F) to 40°C (104°F)
Discharge	-15°C (5°F) to 50°C (122°F)
Storage	-15°C (5°F) to 40°C (104°F)

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

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

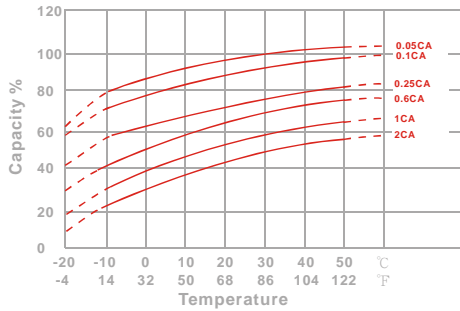
**Case Material** ABS  
(UL94 HB flame retardant case / cover)

**Terminal** F1 (Faston Tab 187)

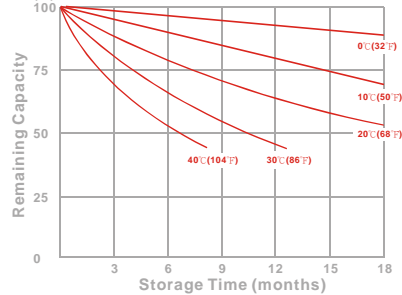


## CHARACTERISTIC & PERFORMANCE DATA

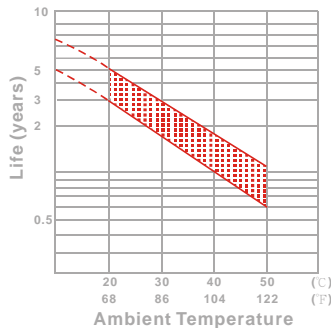
Effect of Temperature on Capacity 25°C (77°F)



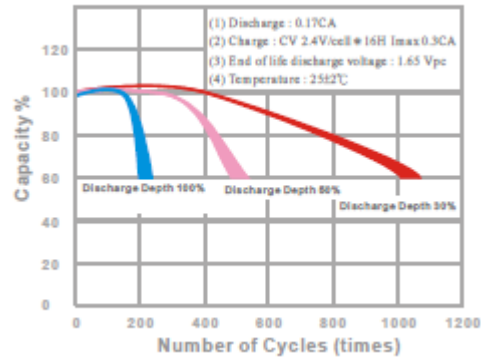
Capacity Retention Characteristic



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
Time								
5	min	11.6	14.1	16.5	18.5	19.1	20.1	20.8
10	min	8.16	9.64	10.8	11.8	12.2	12.5	12.9
15	min	6.79	7.81	8.53	9.15	9.44	9.56	9.86
30	min	4.79	5.27	5.59	5.83	5.93	6.03	6.13
60	min	3.04	3.26	3.41	3.53	3.58	3.66	3.71
120	min	1.87	1.98	2.05	2.12	2.17	2.17	2.22
180	min	1.43	1.49	1.54	1.58	1.61	1.61	1.64
240	min	1.18	1.23	1.26	1.29	1.31	1.31	1.33
300	min	1	1.04	1.06	1.08	1.10	1.1	1.12
600	min	0.579	0.596	0.604	0.61	0.62	0.616	0.623
1200	min	0.32	0.322	0.322	0.326	0.327	0.329	0.33

### - 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	6.14	7.55	8.95	10.2	10.7	11.2	11.8
10	min	4.28	5.11	5.78	6.37	6.64	6.85	7.14
15	min	3.53	4.1	4.52	4.89	5.10	5.17	5.39
30	min	2.46	2.72	2.91	3.05	3.14	3.18	3.27
60	min	1.55	1.66	1.75	1.82	1.86	1.9	1.94
120	min	0.944	1	1.05	1.09	1.13	1.12	1.16
180	min	0.719	0.756	0.783	0.809	0.829	0.829	0.849
240	min	0.591	0.622	0.641	0.657	0.674	0.67	0.687
300	min	0.502	0.524	0.538	0.551	0.563	0.563	0.575
600	min	0.287	0.298	0.303	0.308	0.313	0.313	0.318
1200	min	0.158	0.16	0.162	0.164	0.165	0.167	0.168

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%)