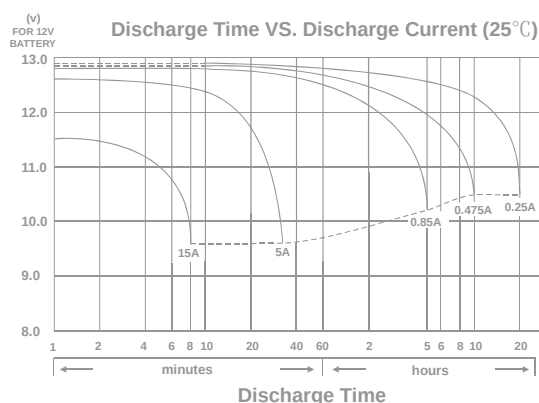
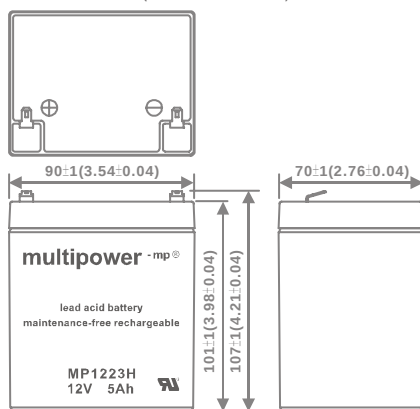
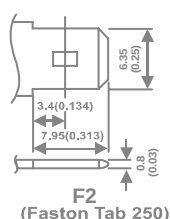


RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MP1223H

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.25A	to	10.50V)	5Ah
10 hour rate	(0.475A	to	10.50V)	4.75Ah
5 hour rate	(0.85A	to	10.20V)	4.25Ah
1 C	(5A	to	9.60V)	3.17Ah
3 C	(15A	to	9.60V)	2Ah

Weight Approx. 2kg(4.4Lbs.)

Internal Resistance (at 1KHz) Approx. 15 mΩ

**Maximum Discharge Current for
5 seconds:** 75A

Charging Methods at 25°C(77°F)

Cycle use:

Charging Voltage 14.4 to 15.0V

Coefficient -5.0mv/°C/cell

Maximum Charging Current : 1.5A

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 92%

3 month 90%

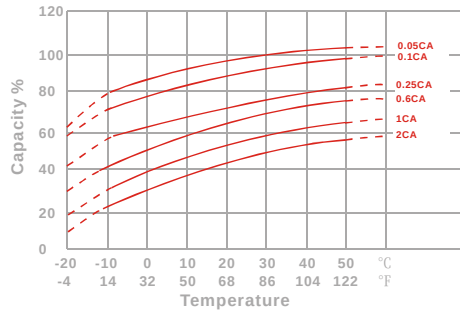
6 month 80%

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

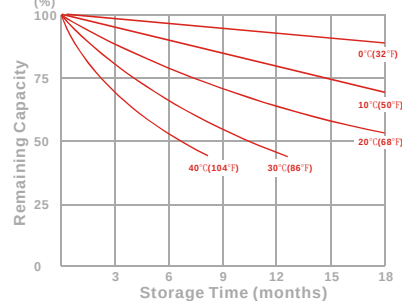
Terminal F1(Faston Tab 187)

CHARACTERISTIC & PERFORMANCE DATA

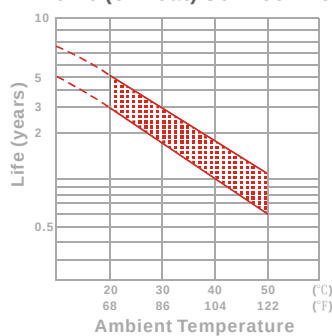
Effect of Temperature on Capacity 25°C(77°F)



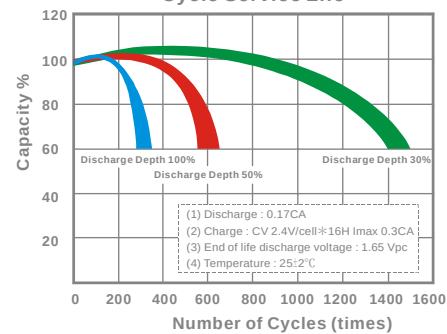
Capacity Retention Characteristic



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	223	239	257	274	281	288	296
10	min	161	174	183	191	193	197	202
15	min	133	142	146	148	149	150	151
30	min	72	76.4	78.5	79.9	80.4	80.8	81.5
60	min	35.8	38.7	40.2	41.6	42.3	42.9	43.7
120	min	18.9	21.8	23.1	23.9	24.2	24.6	25.2
180	min	14.6	15.9	17.1	18.2	18.6	18.9	19.5
240	min	11.8	13.1	13.8	14.2	14.4	14.6	14.9
300	min	10.6	11.3	11.9	12.2	12.3	12.4	12.6
600	min	6.13	6.61	6.97	7.11	7.16	7.22	7.31
1200	min	3.19	3.45	3.64	3.71	3.74	3.77	3.82

- 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	18.7	22.8	25.2	27.1	27.8	28.4	29.3
10	min	13.8	15.0	15.9	16.7	16.9	17.3	17.8
15	min	10.6	11.3	11.7	12.0	12.2	12.4	12.6
30	min	5.98	6.31	6.49	6.63	6.68	6.74	6.85
60	min	3.09	3.34	3.48	3.59	3.62	3.67	3.74
120	min	1.72	1.85	1.92	1.98	2.01	2.03	2.06
180	min	1.37	1.46	1.51	1.55	1.57	1.59	1.61
240	min	0.974	1.05	1.09	1.13	1.14	1.16	1.18
300	min	0.863	0.931	0.965	0.986	0.998	1.01	1.03
600	min	0.490	0.532	0.551	0.574	0.577	0.582	0.590
1200	min	0.257	0.291	0.297	0.302	0.304	0.307	0.311

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%)