

# multipower - mp®

## RECHARGEABLE SEALED LEAD ACID BATTERY

## SPECIFICATION



### MPL1225H

Nominal Voltage(V) 12V

#### Nominal Power

15 mins rate: 23W/cell to 1.67V/cell

#### Nominal Capacity

20 hour rate	(0.25A	to	10.50V)	5.00Ah
8 hour rate	(0.6A	to	10.50V)	4.80Ah
5 hour rate	(0.85A	to	10.20V)	4.25Ah

Weight Approx. 1.97kg (4.33Lbs.)

Internal Resistance (at 1KHz) Approx. 17 mΩ

#### Maximum Discharge Current for

5 seconds: 75A

#### Charging Methods at 25°C (77°F)

Maximum Charging Current:	1.5A
Boost Charging Voltage	14.4 to 15.0V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.5 to 13.8V
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)

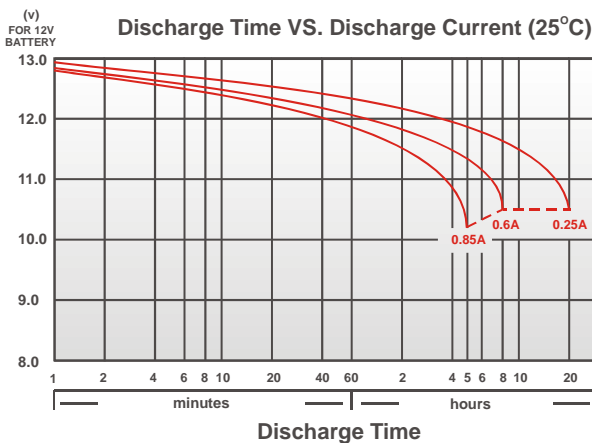
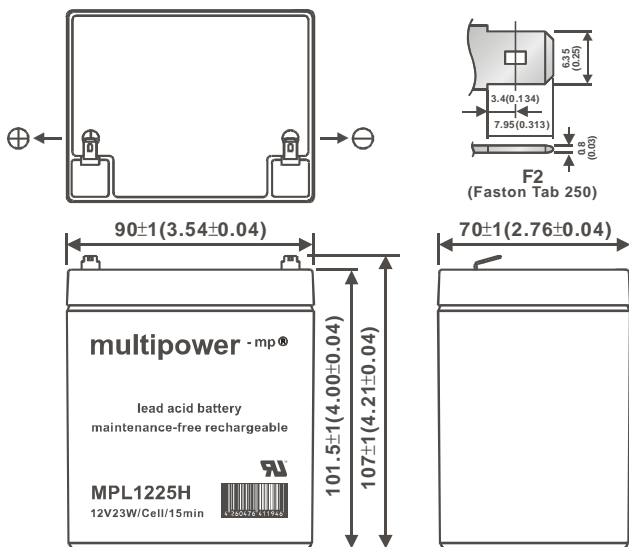
1 month	98%
3 month	96%
6 month	94%

Case Material ABS UL94 HB

Terminal F2 (Faston Tab 250)

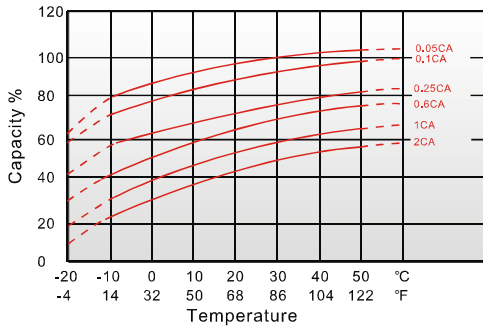
#### Design Life

Eurobat (20°C) : 10/12 Years Long Life

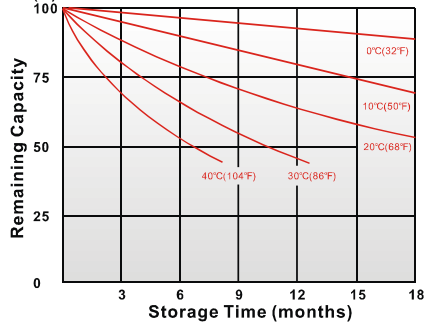


## CHARACTERISTIC & PERFORMANCE DATA

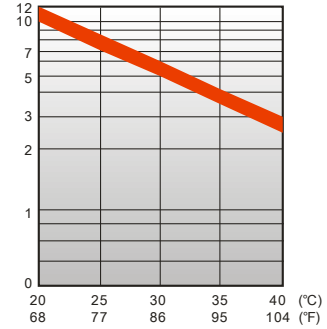
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



### - PERFORMANCE DATA

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

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.65V	1.60V
2	min	57.2	61.7	65.6	67.8	70.0	71.8	73.6
4	min	42.9	45.8	48.3	50.8	53.3	55.8	58.2
5	min	37.1	40.1	43.0	45.7	47.0	48.2	49.3
6	min	36.0	39.0	41.7	42.5	43.0	43.3	43.6
8	min	33.2	35.2	36.3	36.7	37.1	37.5	37.7
10	min	26.2	28.3	29.8	30.6	31.0	31.3	31.6
15	min	21.5	22.2	22.7	23.1	23.5	23.8	24.0
20	min	17.1	17.9	18.5	18.9	19.2	19.5	19.7
30	min	12.0	12.7	13.1	13.3	13.4	13.5	13.6
45	min	8.94	9.59	10.2	10.4	10.6	10.7	10.8
60	min	5.97	6.45	6.70	6.93	7.05	7.15	7.28
90	min	5.03	5.38	5.69	5.77	5.85	5.91	5.95
120	min	3.15	3.63	3.85	3.98	4.07	4.16	4.20
180	min	2.43	2.65	2.85	2.97	3.04	3.11	3.16
240	min	2.08	2.21	2.32	2.38	2.42	2.46	2.50
300	min	1.70	1.82	1.90	1.94	1.98	2.01	2.04
480	min	1.10	1.19	1.25	1.29	1.30	1.31	1.32
1200	min	0.519	0.544	0.573	0.580	0.585	0.590	0.594

- Discharge Rates in Amperes per Battery 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
2	min	27.6	31.3	34.3	36.9	38.9	40.9	42.1
4	min	24.9	26.4	27.3	28.0	28.6	29.1	29.6
5	min	18.7	22.8	25.2	26.4	27.0	27.3	27.5
6	min	17.6	21.1	22.2	23.1	23.7	24.1	24.4
8	min	16.5	17.7	18.5	19.1	19.7	20.1	20.3
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
20	min	9.03	9.35	9.63	9.74	9.82	9.90	9.95
30	min	5.98	6.31	6.49	6.59	6.68	6.77	6.85
45	min	4.65	4.96	5.24	5.30	5.34	5.36	5.38
60	min	3.09	3.34	3.48	3.57	3.63	3.69	3.74
90	min	2.53	2.73	2.85	2.91	2.97	3.03	3.08
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	1.15	1.17	1.18
300	min	0.863	0.868	0.872	0.874	0.876	0.878	0.880
480	min	0.533	0.572	0.600	0.625	0.634	0.639	0.643
1200	min	0.240	0.249	0.256	0.258	0.259	0.260	0.261

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%)