

multipower - mp[®]

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPL1228H V0

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.36A	to	10.50V)	7.20Ah
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)	4.56Ah
3 C	(21.6A	to	9.60V)	2.88Ah

Weight Approx. 2.4kg (5.28Lbs.)

Internal Resistance (at 1KHz) Approx. 24 mΩ

Maximum Discharge Current for

5 seconds: 108A

Charging Methods at 25°C (77°F)

Maximum Charging Current:	2.16A
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)

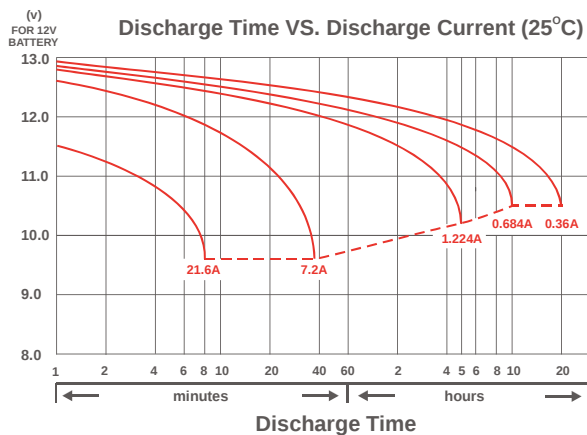
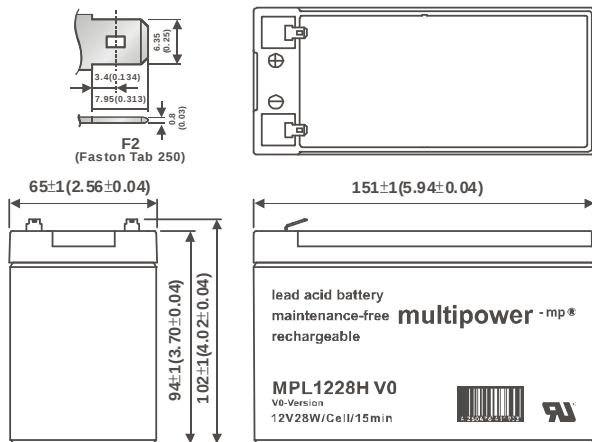
1 month	97%
3 month	92%
6 month	85%

Case Material ABS UL94 V-0

Terminal F2 (Faston Tab 250)

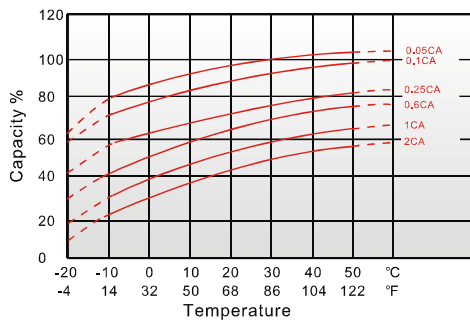
Design Life

Eurobat (20°C) : 10/12 years long life

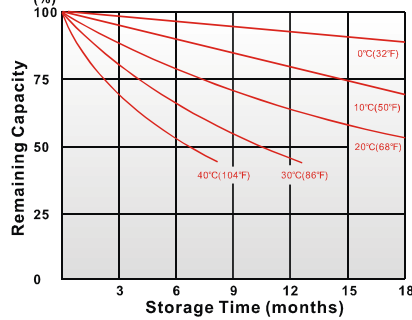


CHARACTERISTIC & PERFORMANCE DATA

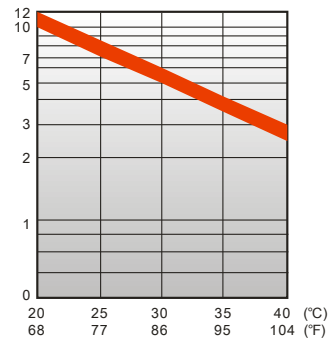
Effect of Temperature on Capacity 25°C(77°F)



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	1.67V	1.65V	1.60V
Time								
5	min	42.8	48.0	50.3	52.5	53.5	54.3	55.8
10	min	29.8	31.3	32.7	34.0	34.8	35.3	36.3
15	min	24.5	25.5	26.2	26.8	27.0	27.5	28.2
30	min	13.0	13.7	14.1	14.5	14.6	14.7	14.9
60	min	8.43	8.73	8.97	9.15	9.22	9.30	9.45
120	min	4.21	4.39	4.63	5.22	5.27	5.32	5.40
180	min	3.27	3.45	3.60	3.73	3.77	3.82	3.87
240	min	2.87	3.01	3.10	3.15	3.17	3.20	3.23
300	min	2.47	2.54	2.63	2.68	2.70	2.72	2.73
600	min	1.36	1.39	1.42	1.44	1.44	1.45	1.46
1200	min	0.694	0.718	0.737	0.750	0.755	0.760	0.770

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