

multipower - mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPL1280H

Nominal Voltage(V) 12V

Nominal Power

15 mins rate: 80W/cell to 1.67V/cell

Nominal Capacity

20 hour rate	(1A	to	10.50V)	20Ah
8 hour rate	(2.25A	to	10.50V)	18Ah
5 hour rate	(3.4A	to	10.20V)	17Ah

Weight Approx. 5.95kg (13.1Lbs.)

Internal Resistance (at 1KHz) Approx. 10 mΩ

Maximum Discharge Current for

5 seconds: 300A

Charging Methods at 25°C (77°F)

Maximum Charging Current:	6A
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

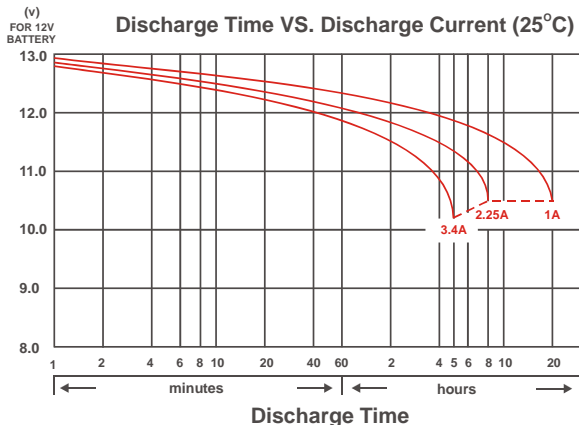
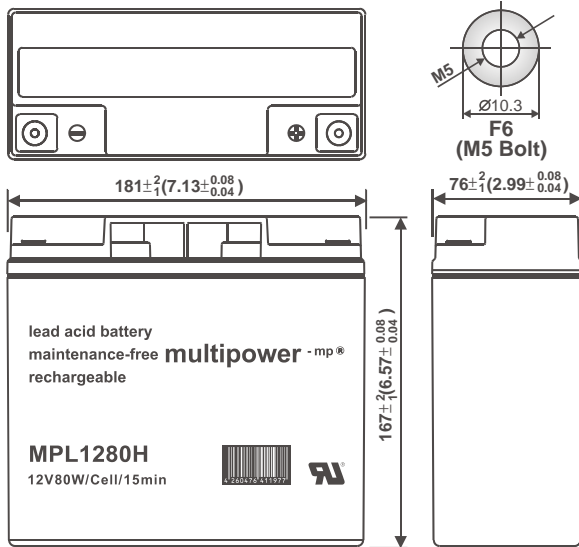
Terminal F6

Description of torque value of hard ware for the terminals:

Recommended torque value	M5: 4 N·m (41kgf·cm)
Maximum allowable torque value	M5: 6 N·m (61kgf·cm)

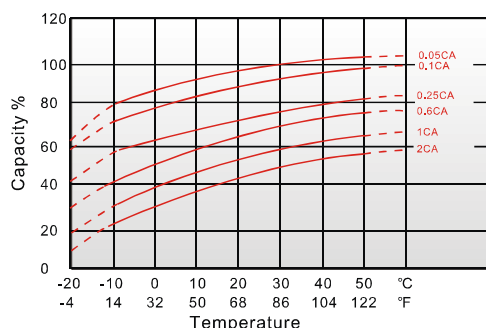
Design Life

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

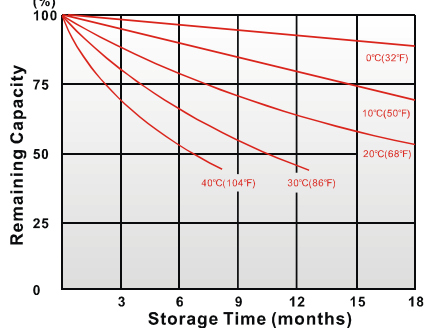


CHARACTERISTIC & PERFORMANCE DATA

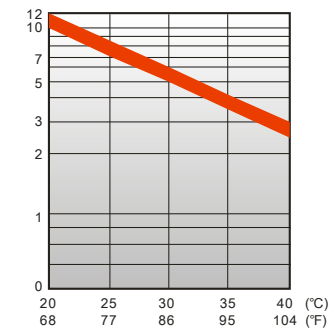
Effect of Temperature on Capacity 25°C(77°F)



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
2	min	199	228	250	259	267	271	274
4	min	162	180	191	198	200	202	204
5	min	148	161	169	175	178	181	184
6	min	144	151	156	161	165	168	170
8	min	115	123	127	131	134	136	138
10	min	93.4	101	108	110	112	114	116
15	min	65.2	72.2	78.4	79.2	80.0	80.6	81.0
20	min	60.8	64.2	66.9	67.3	67.7	68.1	68.5
30	min	39.5	43.2	46.2	47.0	47.6	48.2	48.6
45	min	34.9	35.8	36.6	37.1	37.6	37.9	38.2
60	min	22.7	23.8	24.6	25.4	26.2	26.6	26.8
90	min	18.5	19.3	19.8	20.1	20.3	20.5	20.6
120	min	12.2	12.7	13.0	13.5	13.6	13.7	13.8
180	min	9.53	9.88	10.1	10.3	10.4	10.5	10.6
240	min	7.63	7.93	8.12	8.22	8.32	8.40	8.46
300	min	6.65	6.88	7.00	7.10	7.13	7.16	7.18
480	min	4.59	4.75	4.83	4.88	4.91	4.93	4.95
600	min	3.55	3.72	3.80	3.82	3.84	3.86	3.88
1200	min	1.92	1.98	2.02	2.06	2.09	2.12	2.15

- 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	112	128	135	142	148	154	159
4	min	78.5	97.2	104	109	113	116	118
5	min	73.4	81.4	88.5	93.2	96.5	99.0	101
6	min	67.9	75.9	83.2	85.0	86.5	87.5	88.2
8	min	61.5	65.7	69.5	71.2	72.4	73.3	73.9
10	min	51.2	55.0	57.2	58.8	60.0	61.2	62.2
15	min	40.0	41.6	43.0	43.7	44.5	45.1	45.5
20	min	32.5	34.0	34.9	35.2	35.5	35.8	36.0
30	min	22.7	23.9	24.3	24.5	24.7	24.9	25.1
45	min	16.5	17.4	18.1	18.6	18.8	19.2	19.5
60	min	11.6	12.2	12.7	13.1	13.5	13.7	13.9
90	min	9.27	10.1	10.8	11.1	11.3	11.5	11.6
120	min	6.16	6.56	6.90	7.16	7.43	7.56	7.70
180	min	4.73	4.90	5.00	5.08	5.11	5.17	5.21
240	min	3.88	3.97	4.04	4.09	4.12	4.15	4.17
300	min	3.30	3.37	3.42	3.46	3.48	3.50	3.51
480	min	2.14	2.23	2.30	2.32	2.33	2.34	2.35
600	min	1.90	1.96	2.00	2.02	2.03	2.04	2.05
1200	min	0.952	0.984	1.01	1.03	1.04	1.05	1.05

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%)