

multipower - mp®

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPC5-12

Nominal Voltage (V) 12V

Nominal Capacity

20 hour rate	(0.25A	to	10.50V)	5.00Ah
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)	2.83Ah
3 C	(15A	to	9.60V)	2.00Ah

Weight Approx. 1.9kg (4.18Lbs.)

Internal Resistance (at 1KHz) Approx. 18 mΩ

Maximum Discharge Current for

5 seconds: 75A

Charging Methods at 25°C (77°F)

Maximum Charging Current:	1.5A
Boost Charging Voltage	14.40 to 15.00V
Boost Charge Time	8-9Hr
Float Charging Voltage	13.50 to 13.80V
Coefficient	-3.0mV/°C/cell

Operating Temperature Range

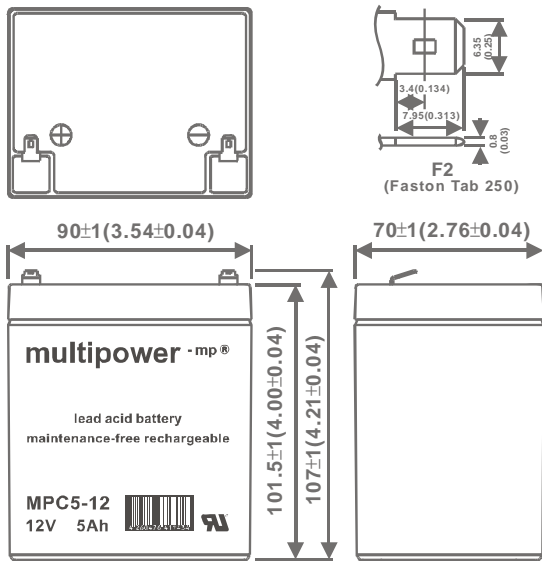
Charge	-15°C (5°F) to 40°C (104°F)
Discharge	-15°C (5°F) to 50°C (122°F)
Storage	-15°C (5°F) to 40°C (104°F)

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

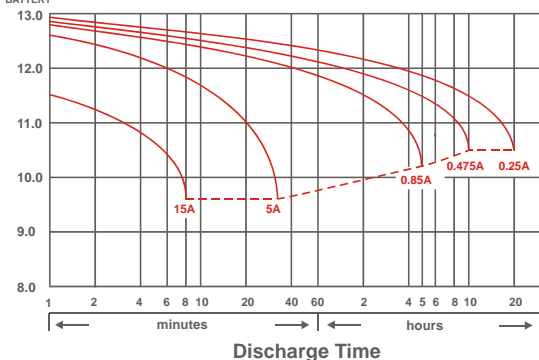
1 month	92%
3 month	90%
6 month	80%

Case Material ABS UL94 HB

Terminal F2 (Faston Tab 250)

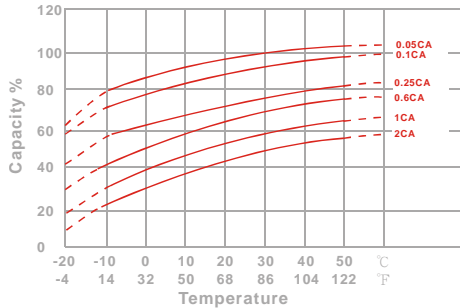


(v) FOR 12V BATTERY
Discharge Time VS. Discharge Current (25°C)

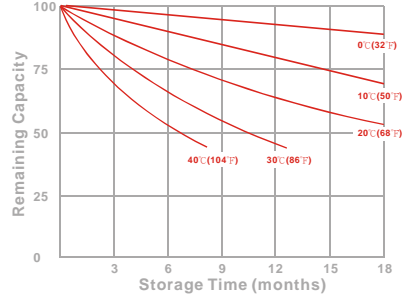


CHARACTERISTIC & PERFORMANCE DATA

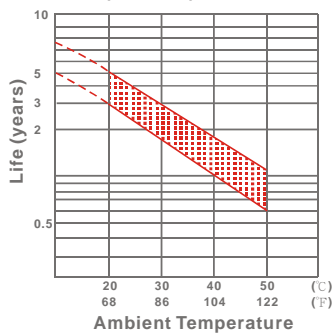
Effect of Temperature on Capacity 25°C(77°F)



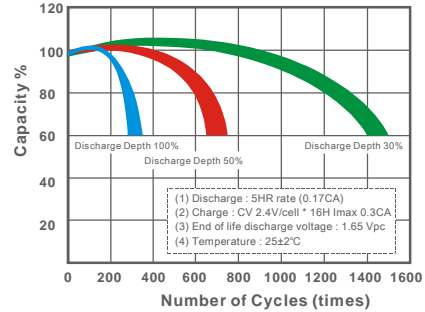
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts 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	35.6	38.7	40.7	42.6	43.4	44.6	46.1
10	min	25.6	27.6	29.1	30.1	30.5	31.2	32.2
15	min	19.9	21.4	22.1	22.7	23.0	23.4	23.8
30	min	10.9	11.5	11.9	12.3	12.4	12.5	12.7
60	min	5.95	6.27	6.47	6.70	6.82	6.93	7.07
120	min	3.13	3.38	3.53	3.65	3.72	3.80	3.92
180	min	2.53	2.72	2.85	2.97	3.02	3.07	3.15
240	min	2.02	2.15	2.27	2.33	2.37	2.40	2.45
300	min	1.73	1.87	1.95	1.98	2.00	2.02	2.05
600	min	1.01	1.09	1.15	1.17	1.18	1.19	1.21
1200	min	0.530	0.572	0.603	0.615	0.620	0.625	0.633

- 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	17.4	21.3	23.4	25.3	25.9	26.5	27.2
10	min	12.9	14.5	15.4	15.9	16.3	16.6	17.0
15	min	9.72	10.3	10.7	10.9	11.0	11.1	11.3
30	min	5.72	6.03	6.13	6.25	6.29	6.34	6.42
60	min	3.04	3.20	3.38	3.46	3.49	3.53	3.59
120	min	1.58	1.70	1.79	1.87	1.91	1.94	1.99
180	min	1.23	1.31	1.37	1.43	1.45	1.48	1.51
240	min	1.00	1.07	1.11	1.15	1.16	1.18	1.21
300	min	0.851	0.898	0.919	0.942	0.953	0.962	0.978
600	min	0.497	0.506	0.514	0.521	0.524	0.529	0.535
1200	min	0.268	0.274	0.279	0.284	0.286	0.287	0.291

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}(+15\% \sim -15\%)$, $6\text{min} \leq X < 10\text{min}(+12\% \sim -12\%)$, $10\text{min} \leq X < 60\text{min}(+8\% \sim -8\%)$, $X \geq 60\text{min}(+5\% \sim -5\%)$