

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPC15-12

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.75A	to	10.50V)	15.00Ah
2 hour rate	(6A	to	9.60V)	12.00Ah
1 C	(15A	to	9.60V)	8.50Ah
3 C	(45A	to	9.60V)	6.00Ah

Weight Approx. 4.5kg (9.9lbs.)

Internal Resistance (at 1KHz) Approx. 9 mΩ

Maximum Discharge Current for

5 seconds: 225A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.7 to 14.8V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current:	4.5A
Standby use:	
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)

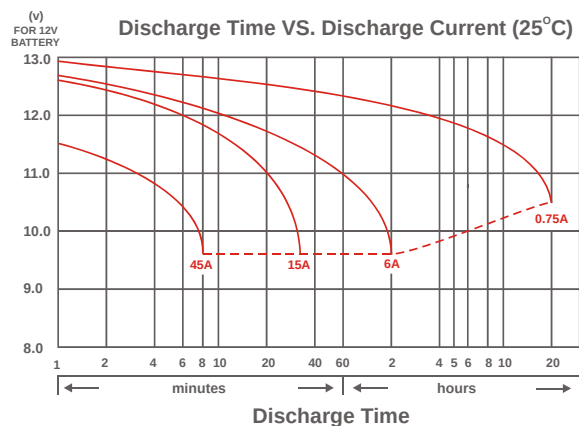
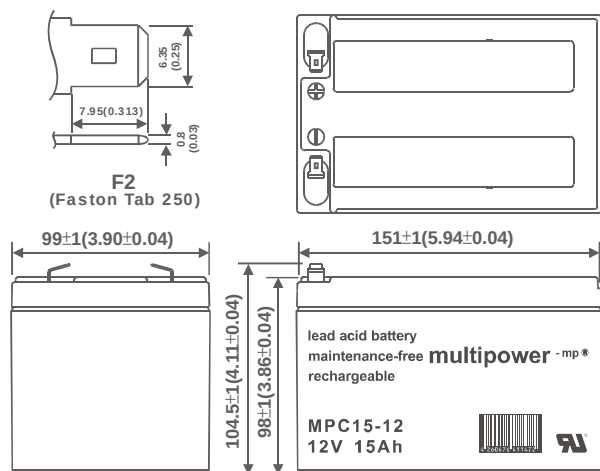
1 month	92%
3 month	90%
6 month	80%

Case Material

ABS UL94 HB

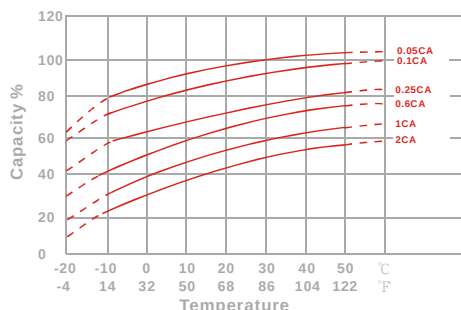
Terminal

F2

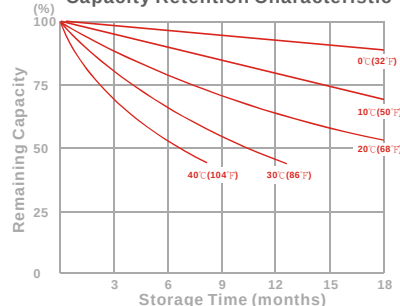


CHARACTERISTIC & PERFORMANCE DATA

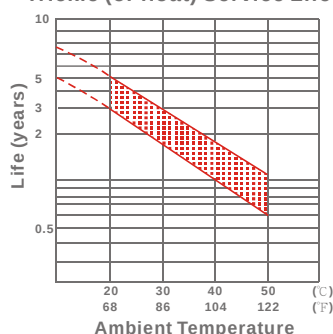
Effect of Temperature on Capacity 25°C (77°F)



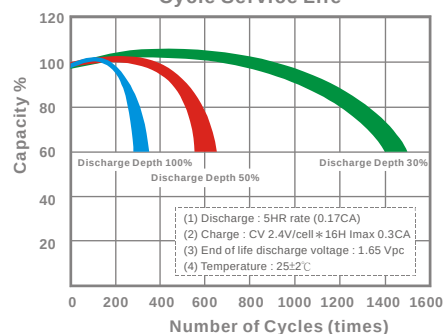
Capacity Retention Characteristic



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	87.6	93.9	98.6	104	110	113	116
10	min	59.9	71.4	72.9	74.1	74.8	75.6	76.3
15	min	49.4	54.4	56.1	57.3	58.1	59.6	60.6
30	min	29.8	31.6	32.5	33.6	34.0	34.2	34.8
60	min	17.2	17.9	18.6	19.0	19.2	19.3	19.5
120	min	9.72	10.2	10.4	10.7	10.7	10.8	11.0
180	min	6.95	7.17	7.33	7.46	7.51	7.55	7.65
240	min	5.42	5.69	5.87	5.93	5.96	5.99	6.01
300	min	4.60	4.72	4.80	4.87	4.91	4.94	4.96
600	min	2.76	2.79	2.83	2.86	2.89	2.98	3.00
1200	min	1.43	1.49	1.53	1.56	1.59	1.60	1.61

- 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	46.3	51.0	55.3	59.5	62.8	64.3	67.7
10	min	32.4	39.7	41.7	42.3	44.0	44.4	46.3
15	min	26.7	30.2	32.1	32.3	33.8	34.7	36.3
30	min	16.1	17.5	18.6	19.7	20.6	20.8	21.8
60	min	8.80	9.22	9.56	9.83	10.0	10.1	10.1
120	min	4.74	4.95	5.07	5.19	5.22	5.28	5.51
180	min	3.48	3.57	3.65	3.71	3.73	3.77	3.83
240	min	2.69	2.74	2.81	2.87	2.89	2.94	2.99
300	min	2.34	2.39	2.42	2.45	2.46	2.48	2.50
600	min	1.23	1.29	1.34	1.37	1.38	1.39	1.40
1200	min	0.692	0.741	0.750	0.756	0.758	0.761	0.764

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%)