

multipower - mp[®]

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



MPC12-12

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.60A	to	10.50V)	12.00Ah
10 hour rate	(1.14A	to	10.50V)	11.40Ah
5 hour rate	(2.04A	to	10.20V)	10.20Ah
1 C	(12A	to	9.60V)	6.80Ah
3 C	(36A	to	9.60V)	4.80Ah

Weight Approx. 4.02kg (8.84Lbs.)

Internal Resistance (at 1KHz) Approx. 11 mΩ

Maximum Discharge Current for

5 seconds: 180A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.7 to 14.8V
Coefficient -5.0mV/°C/cell	
Maximum Charging Current:	3.6A
Standby use:	
Float Charging Voltage	13.5 to 13.8V
Coefficient -3.0mV/°C/cell	

Operating Temperature Range

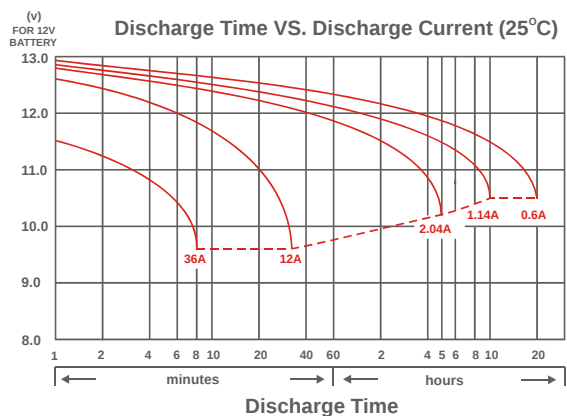
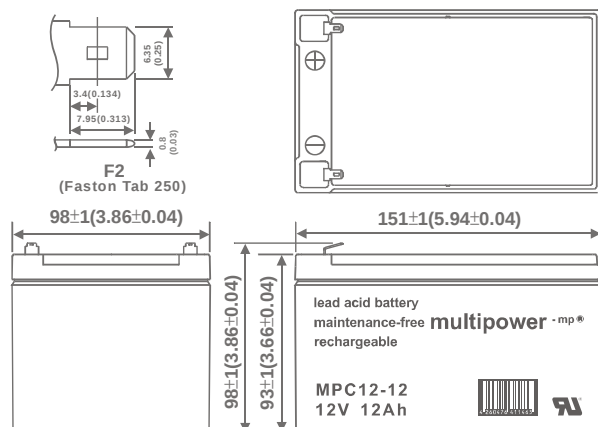
Charge	-15°C (5°F)	to	40°C (104°F)
Discharge	-15°C (5°F)	to	50°C (122°F)
Storage	-15°C (5°F)	to	40°C (104°F)

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

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

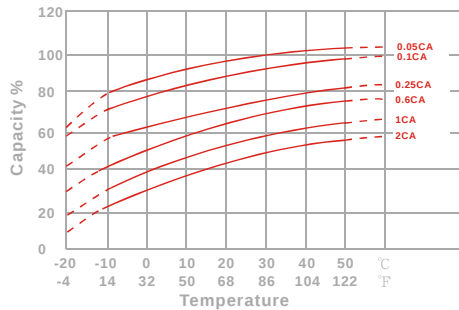
Case Material ABS UL94 HB

Terminal F2 (Faston Tab 250)

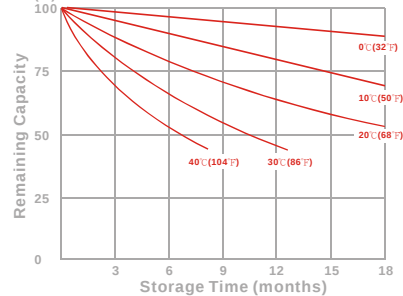


CHARACTERISTIC & PERFORMANCE DATA

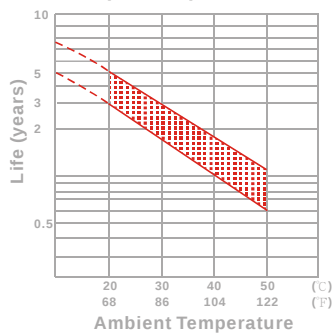
Effect of Temperature on Capacity 25°C(77°F)



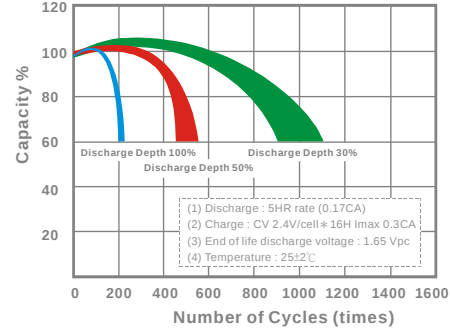
Capacity Retention Characteristic



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	77.2	84.2	89.3	94.8	97.3	99.7	105
10	min	56.5	60.3	63.0	65.3	66.2	67.5	68.8
15	min	42.2	45.3	47.2	48.5	49.2	49.8	51.0
30	min	26.7	28.0	29.0	30.0	30.3	30.7	31.2
60	min	14.9	15.9	16.6	17.2	17.3	17.5	17.7
120	min	7.80	8.60	9.02	9.22	9.28	9.38	9.52
180	min	5.40	6.15	6.53	6.68	6.97	7.10	7.20
240	min	4.43	4.97	5.22	5.37	5.43	5.52	5.62
300	min	4.12	4.35	4.51	4.65	4.72	4.77	4.83
600	min	2.43	2.55	2.62	2.66	2.68	2.70	2.72
1200	min	1.29	1.31	1.35	1.37	1.39	1.40	1.43

- 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	37.8	41.8	44.6	47.5	48.8	50.1	52.7
10	min	28.1	30.3	31.5	32.7	33.2	33.8	34.6
15	min	21.3	22.6	23.7	24.6	25.0	25.4	26.1
30	min	12.6	13.5	14.1	14.6	14.8	15.0	15.3
60	min	8.55	8.74	8.86	8.97	9.02	9.08	9.16
120	min	4.71	4.84	4.95	5.04	5.08	5.13	5.18
180	min	3.14	3.33	3.40	3.46	3.49	3.52	3.56
240	min	2.15	2.26	2.35	2.42	2.45	2.49	2.74
300	min	1.98	2.06	2.12	2.18	2.20	2.23	2.27
600	min	1.19	1.22	1.24	1.26	1.27	1.28	1.29
1200	min	0.619	0.626	0.645	0.654	0.661	0.669	0.683

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%)