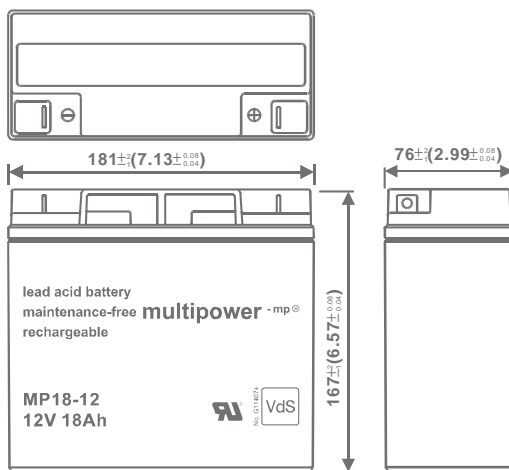
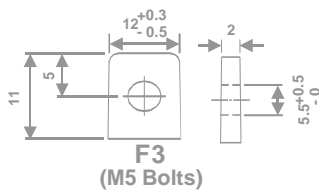


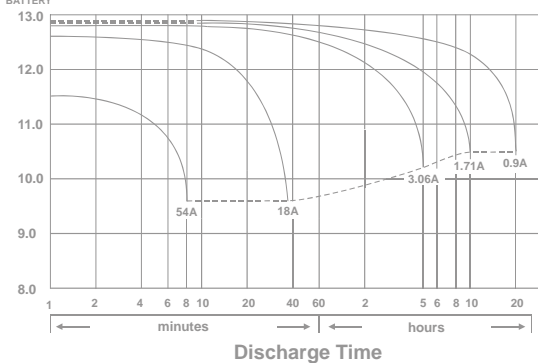
multipower - mp[®]

RECHARGEABLE SEALED LEAD ACID BATTERY

SPECIFICATION



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



MP18-12

Nominal Voltage(V) 12V

Nominal Capacity

20 hour rate	(0.9A to 10.50V)	18.00Ah
10 hour rate	(1.71A to 10.50V)	17.10Ah
5 hour rate	(3.06A to 10.20V)	15.30Ah
1 C	(18A to 9.60V)	11.40Ah
3 C	(54A to 9.60V)	7.20Ah

Weight 5.6kg (12.32Lbs.)

Internal Resistance (at 1KHz) Approx. 10.5 mΩ

Maximum Discharge Current for

5 seconds: 270A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.7 to 14.8V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current:	5.4A
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)

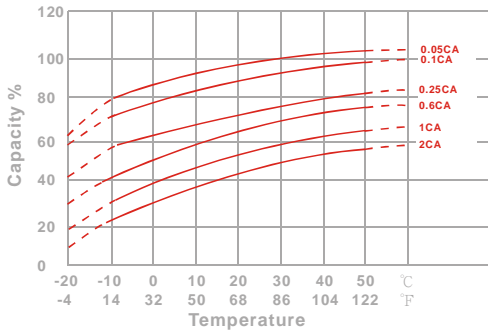
1 month	92%
3 month	90%
6 month	80%

Case Material ABS UL94 HB

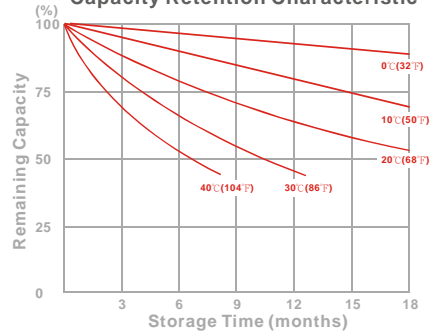
Terminal F3

CHARACTERISTIC & PERFORMANCE DATA

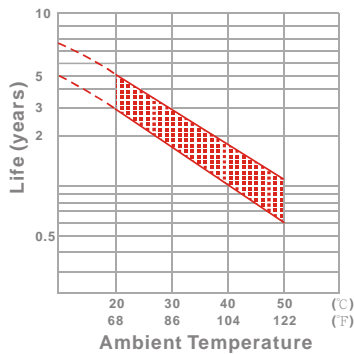
Effect of Temperature on Capacity 25°C(77°F)



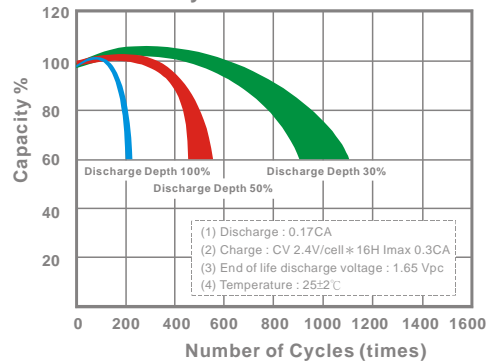
Capacity Retention Characteristic



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)

Time	End Voltage							
	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V	
5	min	98.9	116	128	135	137	139	141
10	min	67.0	77.1	84.5	89.1	90.2	91.7	92.9
15	min	57.2	64.5	69.4	72.5	73.3	74.2	75.1
30	min	32.7	35.1	37.7	39.4	39.8	40.3	40.8
60	min	18.8	19.8	20.7	21.3	21.5	21.8	22.2
120	min	11.9	12.4	12.7	13.1	13.2	13.3	13.5
180	min	8.75	9.10	9.33	9.53	9.60	9.68	9.78
240	min	6.63	6.93	7.12	7.27	7.32	7.38	7.46
300	min	5.82	6.05	6.17	6.27	6.30	6.35	6.41
600	min	3.40	3.52	3.60	3.67	3.68	3.72	3.75
1200	min	1.77	1.83	1.88	1.92	1.93	1.95	1.96

- Discharge Rates in Amperes per Battery to Various End Voltages at 25°C(77°F)

Time	End Voltage							
	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V	
5	min	62.6	68.3	71.9	75.1	76.4	77.8	80.2
10	min	38.6	41.8	44.3	46.5	47.4	48.4	50.1
15	min	31.9	34.6	36.3	37.7	38.2	38.8	39.7
30	min	17.4	18.7	19.8	20.7	21.0	21.4	21.9
60	min	9.74	10.3	10.7	11.0	11.1	11.3	11.5
120	min	5.98	6.23	6.39	6.53	6.58	6.64	6.72
180	min	4.35	4.52	4.64	4.73	4.76	4.80	4.85
240	min	3.43	3.52	3.58	3.62	3.63	3.65	3.68
300	min	2.96	3.02	3.07	3.11	3.12	3.14	3.16
600	min	1.73	1.77	1.80	1.82	1.83	1.84	1.85
1200	min	0.893	0.914	0.931	0.946	0.952	0.959	0.962

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

The tolerance range : X<6min (+15%~-15%), 6min≤X<10min (+12%~-12%), 10min≤X<60min (+8%~-8%), X≥60min (+5%~-5%)