

MP18-12A

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)	10.20Ah
3 C	(54A to 9.60V)	7.20Ah

Weight 6.3kg (13.86lbs)

Internal Resistance (at 1KHz) Approx. 10 mΩ

Maximum Discharge Current for

5 seconds: 270A

Charging Methods at 25°C (77°F)

Cycle use:	
Charging Voltage	14.70V to 14.80V
Coefficient	-5.0mV/°C/cell
Maximum Charging Current:	5.4A
Standby use:	
Float Charging Voltage	13.50V 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)

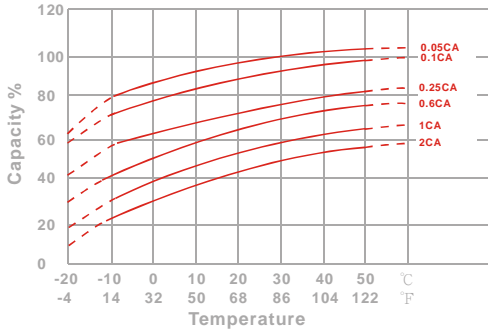
1 month	92%
3 month	90%
6 month	80%

Case Material ABS
(UL94 HB flame retardant case / cover)

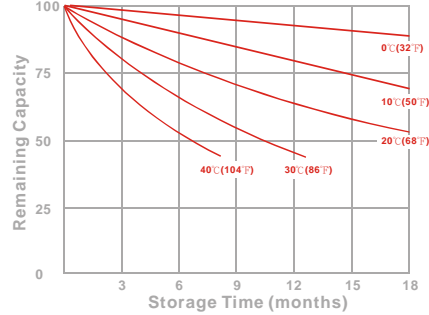
Terminal F3

CHARACTERISTIC & PERFORMANCE DATA

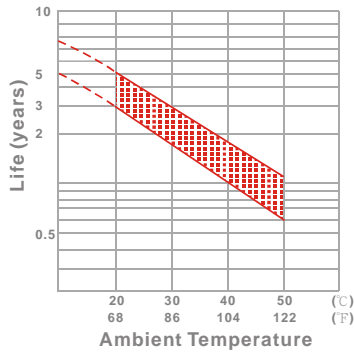
Effect of Temperature on Capacity 25°C(77°F)



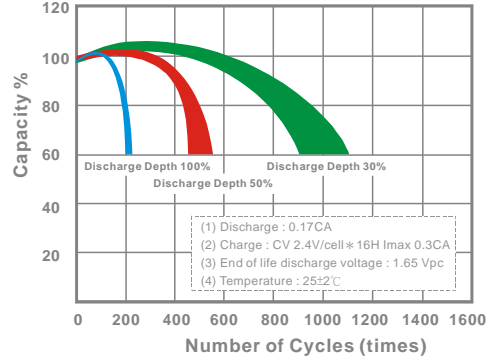
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts 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	101	118	130	137	139	141	143
10	min	70.7	80.8	88.2	92.7	93.8	95.4	96.6
15	min	61.2	68.5	73.4	76.5	77.3	78.2	79.1
30	min	33.2	35.6	38.2	39.9	40.3	40.8	41.3
60	min	20.3	21.3	22.2	22.8	23.0	23.3	23.7
120	min	11.7	12.3	12.6	13.0	13.1	13.2	13.4
180	min	8.73	9.08	9.32	9.52	9.58	9.67	9.76
240	min	6.87	7.17	7.35	7.50	7.55	7.62	7.70
300	min	5.95	6.18	6.30	6.40	6.43	6.48	6.54
600	min	3.55	3.67	3.75	3.82	3.83	3.87	3.90
1200	min	1.83	1.90	1.95	1.98	2.00	2.02	2.03

- Discharge Rates in Amperes 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	67.0	72.7	76.3	79.5	80.8	82.2	84.6
10	min	40.6	43.8	46.3	48.5	49.4	50.4	52.1
15	min	33.6	36.3	38.0	39.5	40.1	40.8	41.7
30	min	17.6	19.1	20.2	21.1	21.4	21.8	22.3
60	min	10.2	10.8	11.3	11.7	11.8	12.0	12.2
120	min	6.01	6.23	6.37	6.49	6.53	6.58	6.65
180	min	4.34	4.51	4.61	4.69	4.72	4.76	4.82
240	min	3.51	3.60	3.67	3.72	3.74	3.77	3.80
300	min	3.02	3.09	3.14	3.18	3.19	3.21	3.23
600	min	1.76	1.81	1.85	1.88	1.89	1.90	1.91
1200	min	0.939	0.958	0.973	0.984	0.987	0.991	0.995

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%)