

## MS Series SLA Battery

### MHB MS Series--Small-size batteries

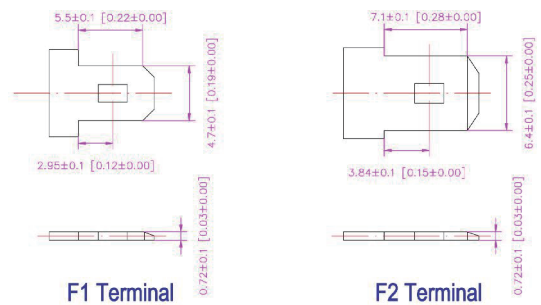
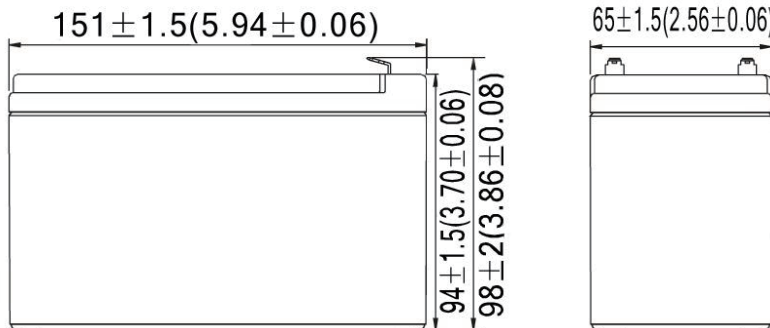
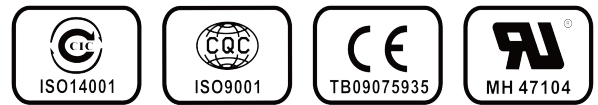
- 100% before shipment testing, stable and reliable long-term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance-free, low self-discharge
- Excellent charging and re-charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating & standby use: 3-5 years

### Application:

- Alarm System
- Cable Television
- Communication Equipment
- Emergency Power System
- Security System
- Medical Equipment
- UPS
- Power tools
- Control Equipment
- Toys

### Construction:

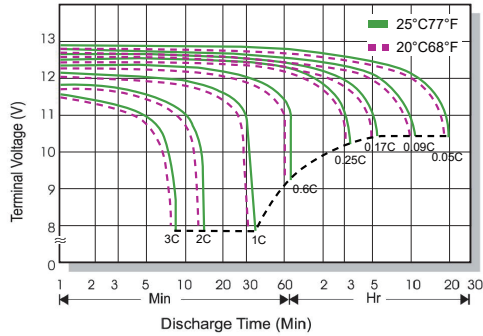
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper
- Separator .....Fiber glass
- Electrolyte .....Sulfuric acid



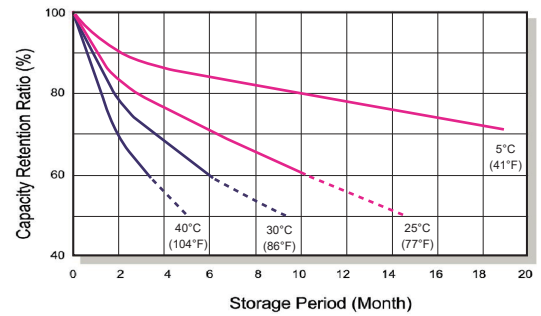
### Speification:

Battery Model	MS 7-12 12V7.2AH			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20HR(0.360A,10.5V)	10HR(0.682A,10.5V)	5HR(1.224A,10.5V)	1HR(4.17A,10.5V)
	7.20 AH	6.82AH	6.12AH	4.17AH
Dimensions	Length	Width	Height	Total Height
	151 mm	65 mm	94 mm	98 mm
Approx. Weight	2.10Kg ±3%			
Internal Resistance	Full charged at 25°C : ≤30.00 mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25oC)	Cycle use		Float use	
	14.4-15.0V(-30mV/°C), max. Current: 2.16A		13.5-13.8V (-20mV/°C)	

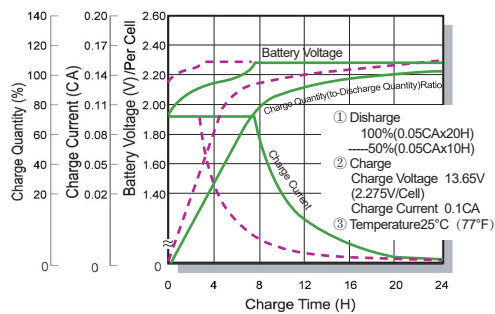
### Terminal Voltage (V) and Discharge Time



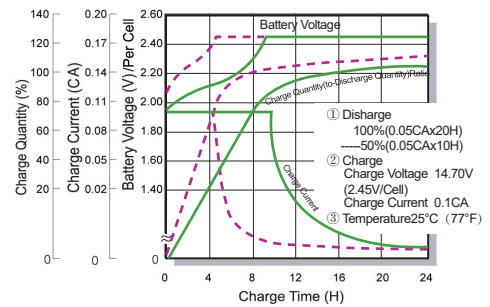
### Capacity Retention Characteristic



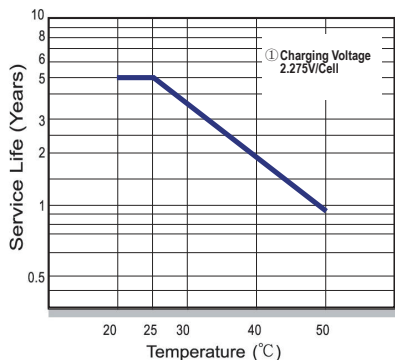
### Battery Voltage and Charge Time for Standby Use



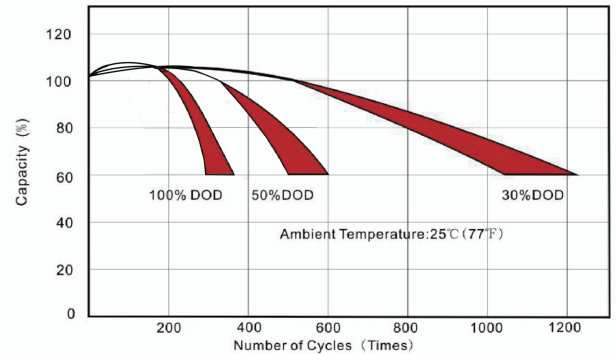
### Battery Voltage and Charge Time for Cycle Use



### Tickle(or Float) Service Life



### Cycle Service Life



### Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	23.42	16.16	11.19	6.94	4.09	2.39	1.82	1.446	1.201	1.026	0.669	0.353
1.75V/Cell	23.86	16.47	11.4	7.07	4.17	2.44	1.85	1.473	1.224	1.046	0.682	0.36
1.70V/Cell	24.57	16.96	12.09	7.36	4.24	2.48	1.89	1.499	1.245	1.064	0.694	0.366
1.67V/Cell	25.29	17.45	13.11	7.77	4.29	2.51	1.91	1.515	1.259	1.075	0.701	0.37
1.60V/Cell	26	17.95	13.8	8.1	4.33	2.53	1.93	1.532	1.272	1.087	0.709	0.374

### Constant Power Discharge (CP, Unit: W) at 25°C (77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	45.66	31.52	21.83	13.54	7.98	4.66	3.55	2.82	2.34	2	1.31	0.69
1.75V/Cell	46.52	32.11	22.24	13.79	8.13	4.75	3.61	2.87	2.39	2.04	1.33	0.7
1.70V/Cell	47.92	33.07	23.57	14.34	8.27	4.83	3.68	2.92	2.43	2.07	1.35	0.71
1.67V/Cell	49.31	34.04	25.57	15.14	8.36	4.88	3.72	2.95	2.45	2.1	1.37	0.72
1.60V/Cell	50.71	35	26.9	15.79	8.45	4.94	3.76	2.99	2.48	2.12	1.38	0.73