

## MS Series SLA Battery

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

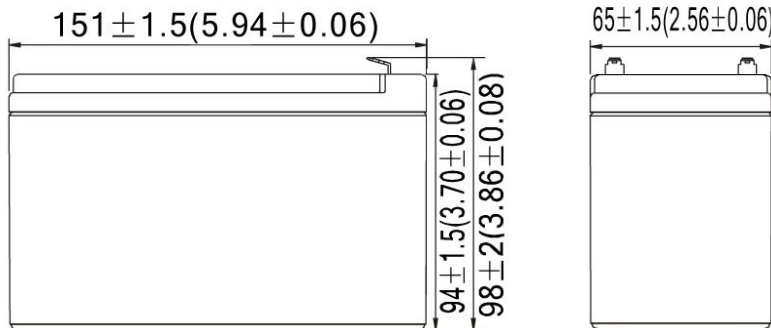
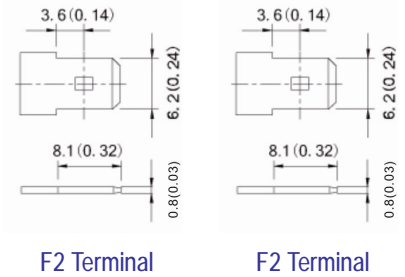
- 100% before shipment testing, stable and reliable long-term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance-free, low self-discharge
- Excellent charging and re-charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating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

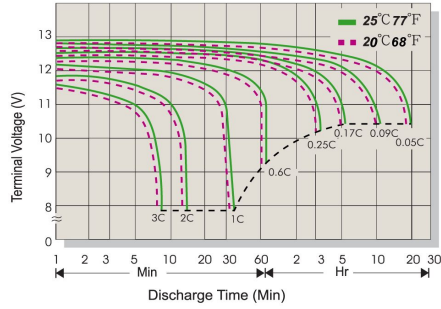
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper
- Separator .....Fiber glass
- Electrolyte .....Sulfuric acid



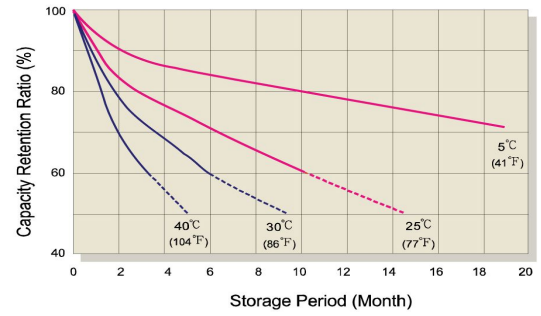
### Speification:

Battery Model	MS 7.2-12 12V7.2AH			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20HR(0.36A,10.5V)	10HR(0.693A,10.5V)	5HR(1.296A,10.5V)	1HR(4.31A,10.5V)
	7.20AH	6.93AH	6.48AH	4.31AH
Dimensions	Length	Width	Height	Total Height
	151mm (5.94inch)	65mm (2.56inch)	94mm (3.70inch)	98mm (3.86inch)
Approx. Weight	2.15Kg (4.74 lbs) ±5%			
Internal Resistance	Full charged at 25°C : ≤35mΩ			
Self Discharge	3% 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		13.6-13.8V (-20mV/°C)	

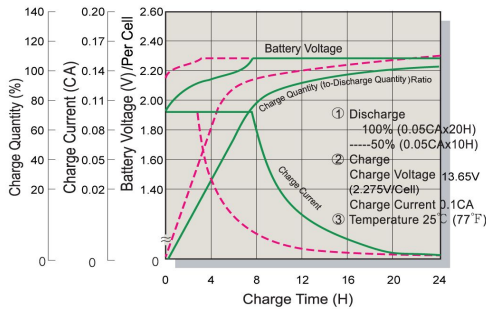
### Terminal Voltage (V) and Discharge Time



### Capacity Retention Characteristic



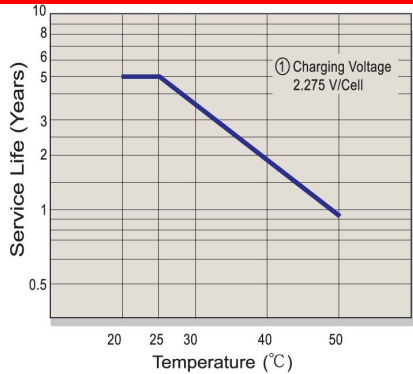
### Battery Voltage and Charge Time for Standby Use



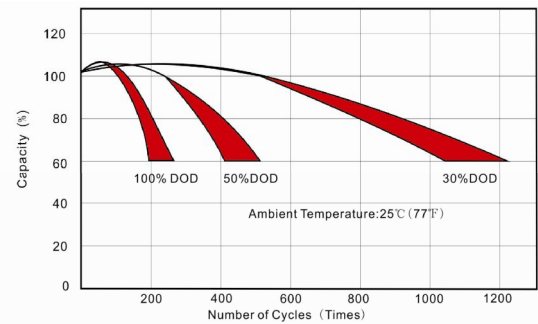
### Battery Voltage and Charge Time for Cycle Use



### 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
1.85V/Cell	19.86	14.67	10.64	7.16	4.15	2.38	1.82	1.454	1.248	1.017	0.667	0.347
1.80V/Cell	20.24	14.95	10.84	7.30	4.23	2.43	1.85	1.481	1.272	1.037	0.680	0.353
1.75V/Cell	20.62	15.23	11.04	7.43	4.31	2.47	1.89	1.509	1.296	1.056	0.693	0.360
1.70V/Cell	22.47	16.14	11.71	7.73	4.39	2.52	1.92	1.536	1.319	1.075	0.705	0.366
1.67V/Cell	24.74	17.51	12.70	8.16	4.44	2.54	1.94	1.552	1.333	1.086	0.712	0.370
1.60V/Cell	26.80	18.43	13.36	8.51	4.48	2.57	1.96	1.569	1.347	1.098	0.720	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
1.85V/Cell	38.72	28.60	20.74	13.96	8.10	4.64	3.55	2.83	2.43	1.98	1.30	0.68
1.80V/Cell	39.46	29.15	21.14	14.23	8.26	4.73	3.62	2.89	2.48	2.02	1.33	0.69
1.75V/Cell	40.20	29.69	21.53	14.49	8.41	4.82	3.68	2.94	2.53	2.06	1.35	0.70
1.70V/Cell	43.82	31.48	22.83	15.07	8.56	4.90	3.75	2.99	2.57	2.10	1.37	0.71
1.67V/Cell	48.24	34.15	24.76	15.91	8.65	4.96	3.79	3.03	2.60	2.12	1.39	0.72
1.60V/Cell	52.26	35.93	26.06	16.60	8.74	5.01	3.83	3.06	2.63	2.14	1.40	0.73