MS7-12 (12V7Ah)

Rechargeable VRLA Battery

FEATURES

- AGM technology for efficient gas recombination and lower I.R.
- Individually tank-formated plates optimize uniformity of cell
- high performance alloy to secure corrosion-proof fearture
- long service life, float or cyclic application
- Maintenance-free operation
- Sealed construction, no electrolyte leakage or spill
- Computer-aided design and manufacturing ensures quality products through control of process and standards

SPECIFICATION

Nominal Voltage	12V	
Nominal Capacity	7Ah@20Hr-rate to 1.75V/cell	
Approx. Weight	2.05Kg (4.52Lbs)	
Internal Resistance	25mΩ(Fully Charged)@25℃	
Self-Discharge	Average 3% of capacity declined per month@25℃	
Nominal Operating Temp.	25±3℃ (77±5℉)	
Operating Temp. Range	Discharge: -20℃～50℃ (-4～122℉)	
	Charge: -15~40℃ (5～104℉)	
	Storage: -20℃～40℃ (-4～104℉)	
Max. Discharge Current	105A(5 sec.)	
Capacity Affected by Temp.	40℃ (104℉)	102%
	25℃ (77℉)	100%
	0℃ (32℉)	85%
	-15℃ (5℉)	65%
Container Material	ABS(UL94-HB,UL94-V0 is optional)	

APPLICATION

- General Purpose
- UPS
- Signal Light
- Alarm and Security System
- DC Power Supply
- Auto Control Sytem

APPLICABLE STANDARDS

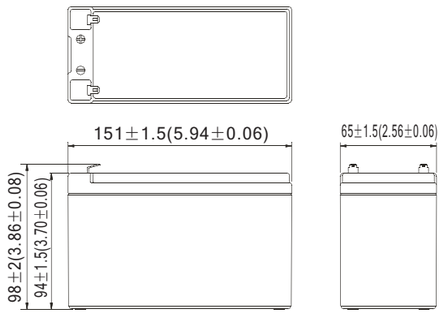
- IEC61056-1/2
- JIS C8702-2003
- GB/T19639.1-2005

ISO14001 ISO2008 TB09075935 MH 47104

OUTER DIMENSION

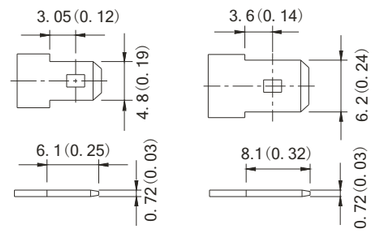
- **Length** 151±1.5(5.94±0.06)
- **Width** 65±1.5(2.56±0.06)
- **Height** 94±1.5(3.70±0.06)
- **Total height** 98±2.0(3.86±0.06)

Unit: mm(inch)



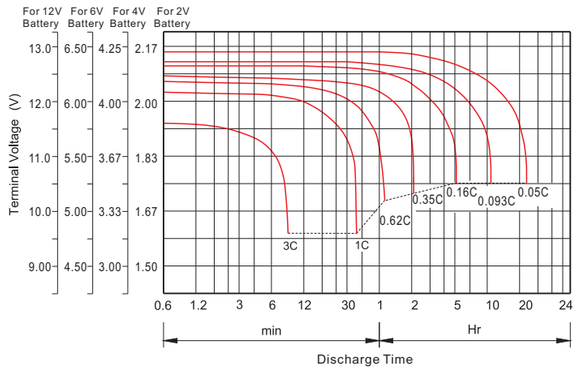
Terminal Type

- Terminal F1
- Terminal F2

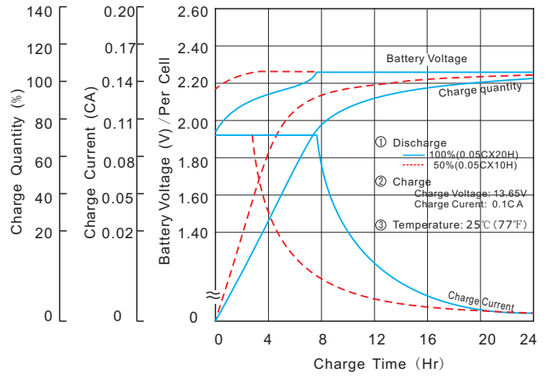


A/0 REV. Jul. 2010

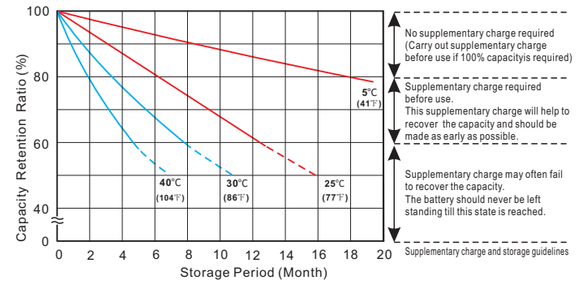
Discharge Characteristics@25℃



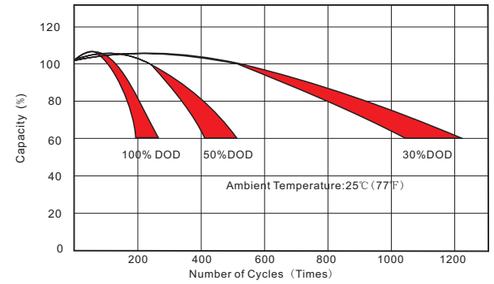
Charge Characteristics(Standby Use)



Capacity Retention Characteristics



Cycle Service life



Charge Procedure

Application	Constant Voltage Charge(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃ (77℉)	2.425	2.40~2.45	0.3C
Standby Use	25℃ (77℉)	2.275	2.25~2.30	

Note: Temp. Compensation Coefficient of Charge Voltage ,Cycle use:-4mv/℃/cell , Standby Use:-3mv/℃/cell

Discharge Current VS. Discharge Voltage

Final Discharge Voltage(V/cell)	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1C	(A)>1C

Constant Current (CC,Unit:A)&Constant Power(CP, Unit:W)Discgarge Table at 25℃(77℉)

F.V. (V/cell) \ Time / Model		5 Min	10 Min	15 Min	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
1.60V	CC(A)	25.2	16.5	12.3	8.1	4.2	2.45	1.80	1.45	1.23	0.81	0.66	0.36
	CP(W)	297	187	141	85	48	28.4	20.85	16.74	14.20	9.36	7.67	4.20
1.70V	CC(A)	23.1	15.8	11.3	7.6	3.9	2.35	1.75	1.40	1.20	0.80	0.65	0.35
	CP(W)	280	177	133	85	46	27.2	20.27	16.22	13.94	9.22	7.53	4.08
1.75V	CC(A)	21.0	14.8	10.5	7.4	3.8	2.30	1.72	1.33	1.20	0.79	0.64	0.35
	CP(W)	270	172	127	84	44	26.7	19.92	15.40	13.85	9.13	7.47	4.05
1.80V	CC(A)	20.2	14.1	9.8	7.2	3.7	2.25	1.69	1.31	1.14	0.77	0.63	0.34
	CP(W)	237	166	122	84	43	26.1	19.69	15.21	13.24	8.75	7.29	3.97
1.85V	CC(A)	18.7	13.3	9.1	7.0	3.6	2.19	1.60	1.28	1.09	0.75	0.61	0.33
	CP(W)	229	161	116	83	42	26.0	19.10	15.17	12.95	8.46	7.15	3.94

Note: The above data are average values, and can be obtained with 3 charge/discharge cycles.

"Experience the strength and realize the endurance"

FUJIAN MIN HUA POWER SOURCE CO., LTD

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