

## SV1290



### FEATURES

- AGM maintenance-free lead-acid battery
- High-efficiency lead-calcium plates
- Construction of fiber-glass separators stabilizes temperature of electrolyte
- High-quality insulation of plates
- Safe system of internal pressure regulating valves
- Reduced self-discharge current
- Sealed construction
- Long cycle life both in float and cycle charge modes
- Quality of products is guaranteed by the control of the manufacturing process in accordance with the standards

### SPECIFICATION

Nominal Voltage	12 V	
Nominal Capacity	9 A·h at 20Hr-rate to 1.75V/cell	
Approx. Weight	2.6 Kg	
Number of cells in battery	6	
Internal Resistance	16 mΩ (Fully Charged) at 25 °C	
Self-Discharge	Average 3% of capacity declined per month at 25 °C	
Operating Temp. Range	Discharge: -20 °C ~ 50 °C	
	Charge: -15 °C ~ 40 °C	
	Storage: -20 °C ~ 40 °C	
Max. Discharge Current	128 A (5 sec.)	
Capacity Affected by Temp.	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Container Material	ABS plastic	

### APPLICATION

**All Purpose  
UPS  
Signal Light  
Alarm and Security System  
DC Power Supply  
Auto Control System**

### APPLICABLE STANDARDS

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



### CHARGE PROCEDURE

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

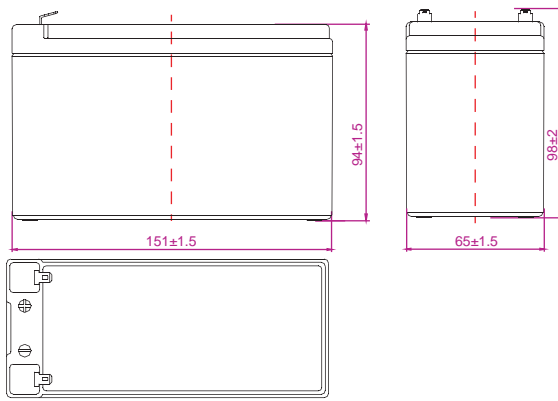
### DISCHARGE CURRENT VS. DISCHARGE VOLTAGE

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

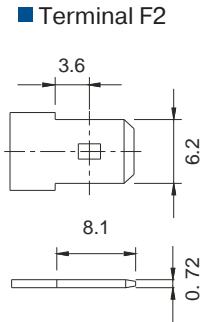
Note: Temp. Compensation Coefficient of Charge Voltage,  
Cycle use: -4mV/°C/cell, Standby Use: -3 mV/°C/cell

## OUTER DIMENSION

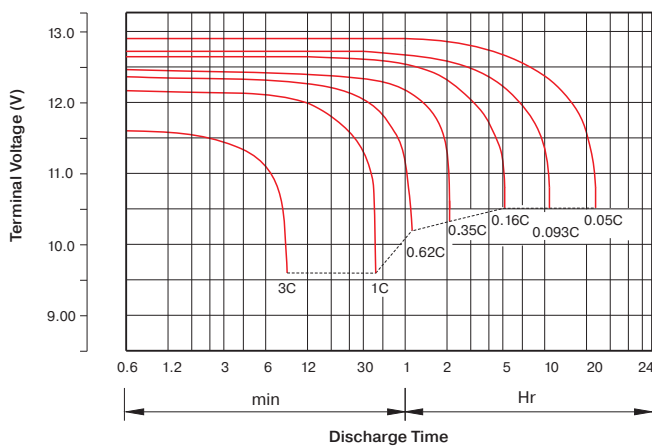
- Length  
151 ± 1.5
  - Width  
65 ± 1.5
  - Height  
94 ± 1.5
  - Total height  
98 ± 2
- Unit: mm



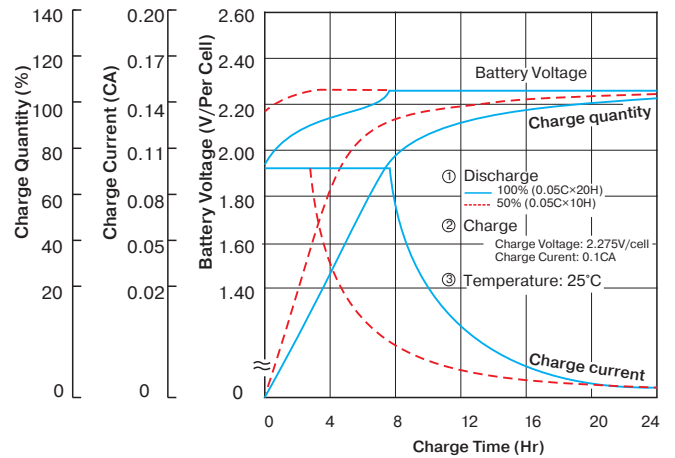
## Terminal Type



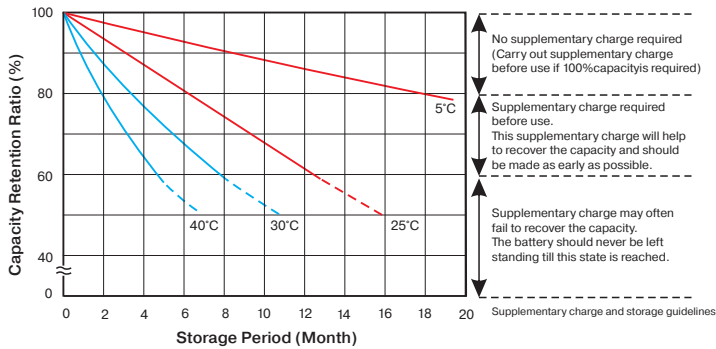
## Discharge Characteristics at 25 °C



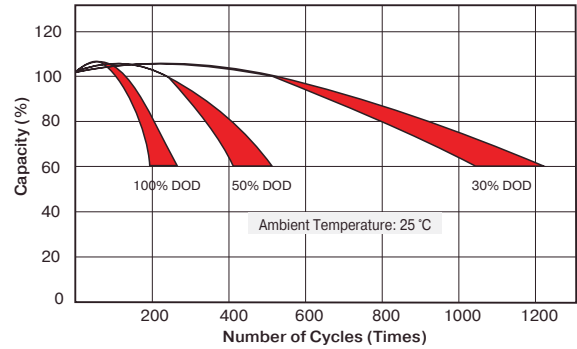
## Charge characteristics (Standby use)



## Capacity Retention Characteristics



## Cycle Service Life



## Constant Current (CC, Unit: A) & Constant Power (CP, Unit: W) Discharge Table at 25 °C

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
		1.60	CC(A)	32.4	21.2	15.8	5.8	5.4	3.15	2.32	1.86	1.58	1.04
	CP(W)	382	240	182	110	62	36.5	26.81	21.53	18.26	12.04	9.86	5.40
1.70	CC(A)	29.7	20.3	14.5	9.8	5.1	3.02	2.25	1.80	1.55	1.02	0.84	0.45
	CP(W)	360	227	171	109	59	35.0	26.06	20.85	17.93	11.85	9.68	5.25
1.75	CC(A)	27.0	19	13.5	9.5	4.9	2.96	2.21	1.71	1.54	1.01	0.83	0.45
	CP(W)	347	221	163	108	57	34.3	25.61	19.80	17.81	11.74	9.60	5.21
1.80	CC(A)	26	18.2	12.6	9.3	4.7	2.89	2.18	1.68	1.46	0.99	0.81	0.44
	CP(W)	304	214	157	108	55	33.6	25.31	19.56	17.03	11.25	9.38	5.10
1.85	CC(A)	304	17.1	11.7	9	4.6	2.81	2.06	1.65	1.4	0.96	0.79	0.43
	CP(W)	294	207	150	107	54	33.4	24.56	19.5	16.65	10.87	9.19	5.06

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