SVEN®
YOU WANT – WE CAN

Rechargeable VRLA Battery

SV645

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	6 V	
Nominal Capacity	4.5 A•h at 20Hr-rate to 1.75V/cell	
Approx. Weight	0.77 Kg	
Number of cells in battery	3	
Internal Resistance	21 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	67 A (5 sec.)	
Capacity Affected by Temp.	40 °C 25 °C 0 °C -15 °C	102% 100% 85% 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

ISO14001 ISO9001 TB09075935 MH 47104

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

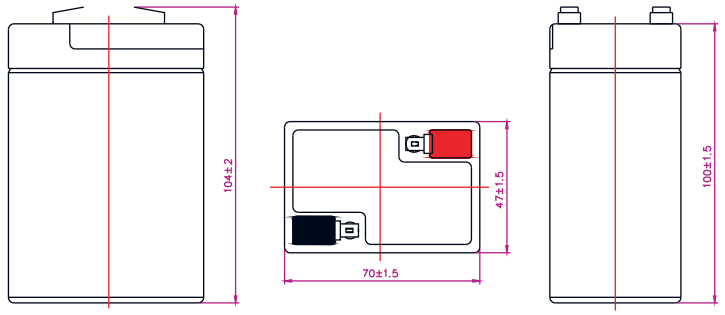
Final Discharge Voltage (V/cell)	1.75	1.70	1.60
Discharge Current (A)	0.2C>(A)	0.2C<(A)<1C	(A)>1C

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

OUTER DIMENSION

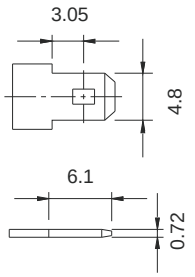
- Length
  70 ± 1.5
- Width
  47 ± 1.5
- Height
  100 ± 1.5
- Total height
  104 ± 2.0

Unit: mm

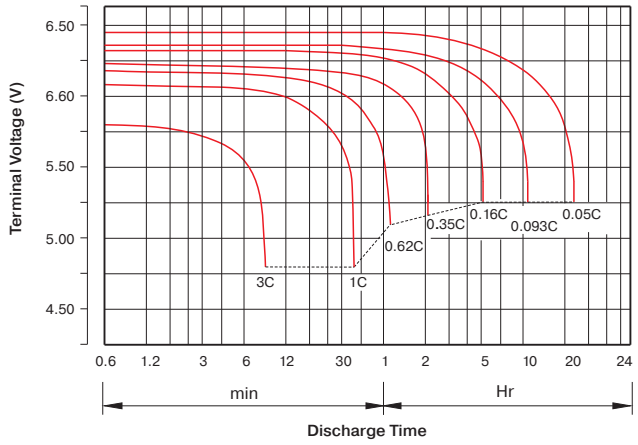


Terminal Type

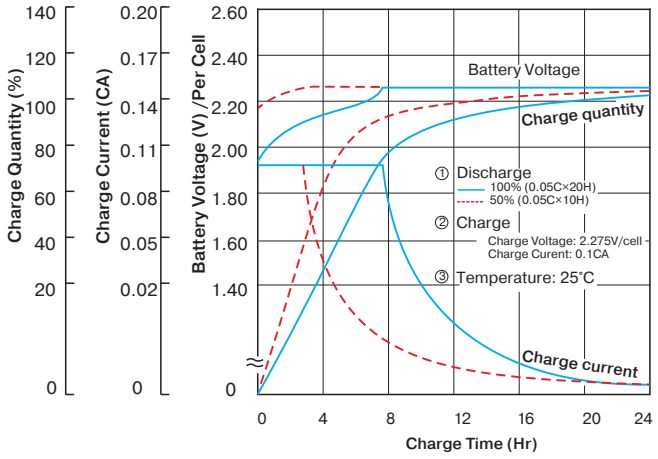
- Terminal F1



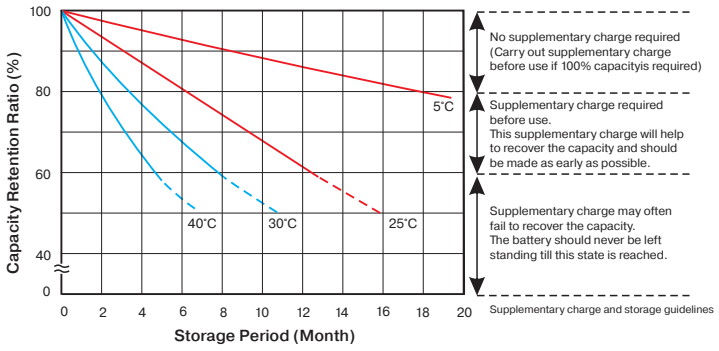
Discharge Characteristics at 25 °C



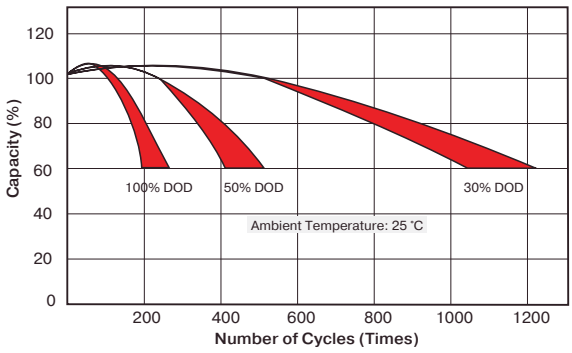
Charge characteristics (Standby use)



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 / Mode	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)	16.20	10.62	7.88	5.18	2.70	1.58	1.16	0.93	0.79	0.52	0.43	0.23
	CP(W)	95.53	60.00	45.38	27.47	15.56	9.11	6.70	5.38	4.57	3.01	2.47	1.35
1.70	CC(A)	14.85	10.16	7.24	4.91	2.53	1.51	1.13	0.90	0.77	0.51	0.42	0.23
	CP(W)	89.91	56.81	42.66	27.28	14.63	8.75	6.52	5.21	4.48	2.96	2.42	1.31
1.75	CC(A)	13.52	9.50	6.75	4.76	2.45	1.48	1.11	0.86	0.77	0.51	0.41	0.23
	CP(W)	86.81	55.13	40.78	27.00	14.19	8.58	6.40	4.95	4.45	2.93	2.40	1.30
1.80	CC(A)	12.99	9.08	6.30	4.63	2.37	1.44	1.09	0.84	0.73	0.49	0.40	0.22
	CP(W)	76.12	53.44	39.28	26.91	13.78	8.40	6.33	4.89	4.26	2.81	2.34	1.28
1.85	CC(A)	12.02	8.55	5.85	4.50	2.29	1.41	1.03	0.82	0.70	0.48	0.39	0.21
	CP(W)	73.59	51.66	37.41	26.72	13.59	8.34	6.14	4.88	4.16	2.72	2.30	1.27

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