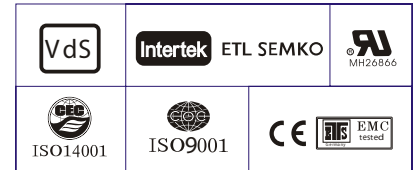


**Specification**

Nominal Voltage	12V
Nominal Capacity(20HR)	9.0AH
Dimensions	Length 151±2mm (5.95 inches)
	Width 65±1mm (2.56 inches)
	Container Height 93.5±1mm (3.68 inches)
	Total Height (with Terminal) 99±1mm (3.90 inches)
	Approx Weight 2.45 kg (5.40lbs)
Terminal	T1 / T2
Container Material	ABS
Rated Capacity	9.00 AH/0.425A (20hr, 1.80V/cell, 25 °C/77 °F)
	7.91 AH/0.791A (10hr, 1.80V/cell, 25 °C/77 °F)
	7.22 AH/1.45A (5hr, 1.75V/cell, 25 °C/77 °F)
	6.50 AH/2.17A (3hr, 1.75V/cell, 25 °C/77 °F)
	5.34 AH/5.34A (1hr, 1.60V/cell, 25 °C/77 °F)
Max. Discharge Current	127.5A (5s)
Internal Resistance	Approx 18m Ω
Operating Temperature Range	Discharge : -15 ~ 50°C (5 ~ 122°F)
	Charge : 0 ~ 40°C (32 ~ 104°F)
	Storage : -15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temperature Range	25 ± 3°C (77 ± 5°F)
Cycle Use	Initial Charging Current less than 2.55A. Voltage 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
Standby Use	40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%
Capacity affected by Temperature	
Self Discharge	SAMAUTO CB batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

**Applications**

- ◆ All purpose
- ◆ Uninterruptable Power Supply(UPS)
- ◆ Electric Power System(EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



**Constant Current Discharge (Amperes) at 25 °C (77°F)**

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.2	12.4	10.3	8.90	6.88	5.07	4.27	2.53	1.98	1.61	1.31	1.14	0.918	0.767	0.421
1.80V/cell	21.7	15.9	12.4	10.5	8.12	5.90	4.79	2.76	2.13	1.72	1.41	1.22	0.973	0.791	0.425
1.75V/cell	24.5	17.5	13.6	11.3	8.43	6.12	5.01	2.86	2.17	1.76	1.45	1.25	0.990	0.812	0.429
1.70V/cell	27.0	19.0	14.5	11.9	8.78	6.36	5.17	2.93	2.23	1.80	1.48	1.28	1.004	0.828	0.437
1.65V/cell	29.7	20.5	15.4	12.6	9.26	6.52	5.29	2.98	2.32	1.86	1.52	1.31	1.020	0.845	0.443
1.60V/cell	32.8	22.3	16.5	13.5	9.78	6.80	5.34	3.10	2.39	1.92	1.57	1.34	1.030	0.854	0.445

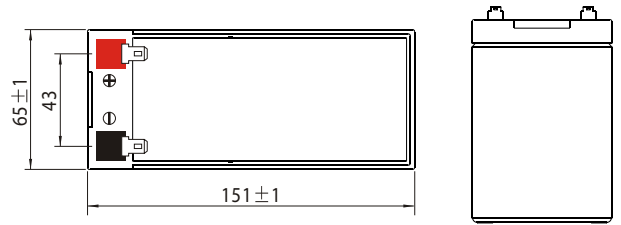
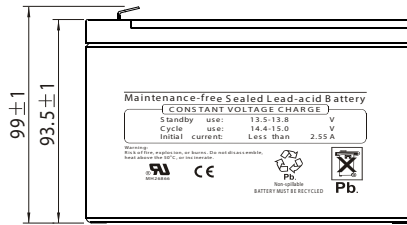
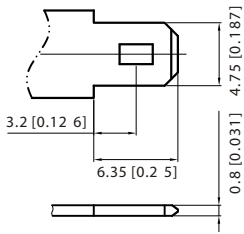
**Constant Power Discharge (Watts) at 25 °C (77°F)**

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.6	23.0	19.2	16.8	13.1	9.75	8.25	4.91	3.86	3.14	2.57	2.24	1.81	1.52	0.834
1.80V/cell	39.3	29.0	22.9	19.5	15.2	11.2	9.19	5.32	4.13	3.34	2.75	2.39	1.92	1.56	0.841
1.75V/cell	43.4	31.3	24.7	20.8	15.7	11.6	9.57	5.50	4.18	3.40	2.81	2.45	1.94	1.60	0.848
1.70V/cell	46.4	33.4	26.0	21.7	16.2	12.0	9.84	5.62	4.29	3.49	2.88	2.49	1.97	1.63	0.863
1.65V/cell	50.5	35.7	27.4	22.9	17.0	12.2	9.99	5.67	4.46	3.59	2.95	2.54	2.00	1.66	0.873
1.60V/cell	54.4	37.9	28.9	24.1	17.8	12.6	10.0	5.89	4.57	3.69	3.03	2.59	2.01	1.68	0.877

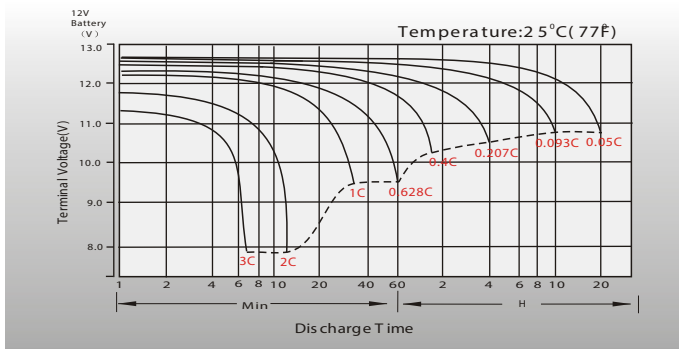
# Dimensions

## T1 Terminal

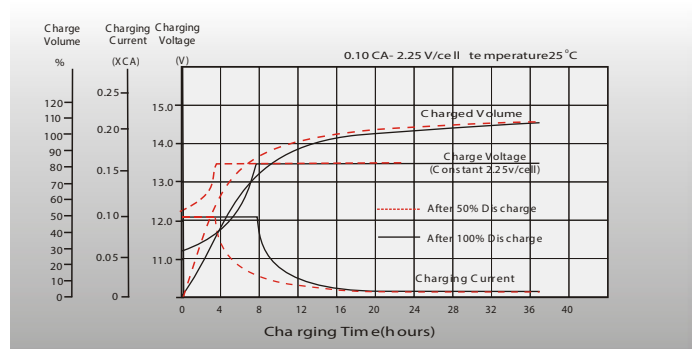
Unit: mm [inches]



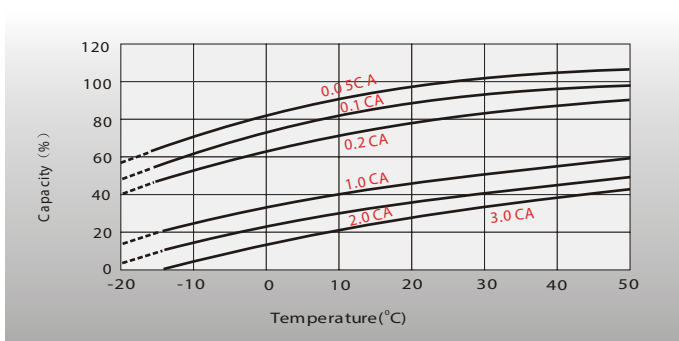
## Discharge Characteristics



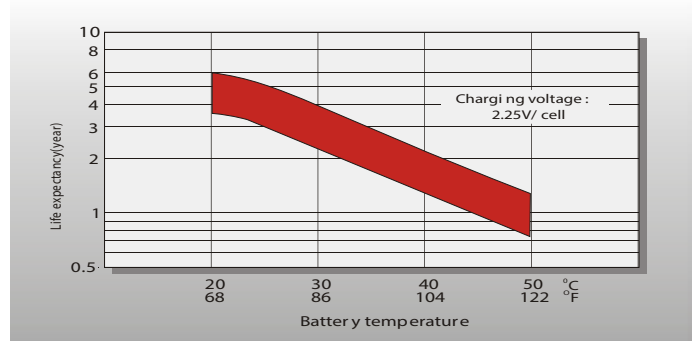
## Float Charging Characteristics



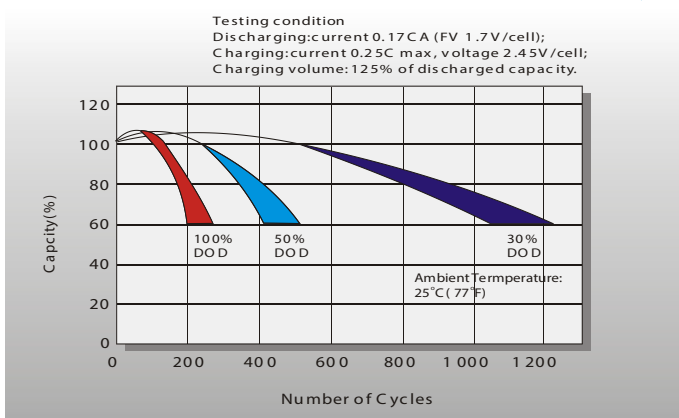
## Temperature Effects in Relation to Battery Capacity



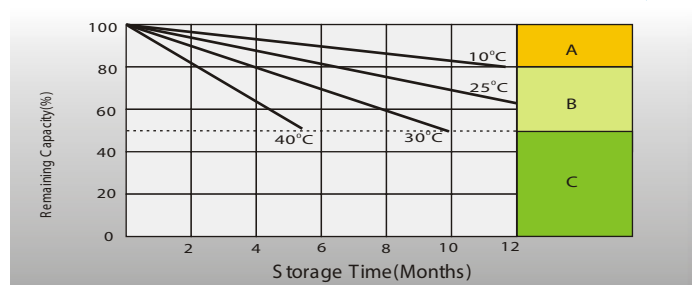
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optimal charging ways below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10 hours at limited current 0.05 CA.
- C** Supplementary charge may often follow to recover the capacity. The battery should never be left standing till this is reached.