

## CJ12-18 (12V18AH)

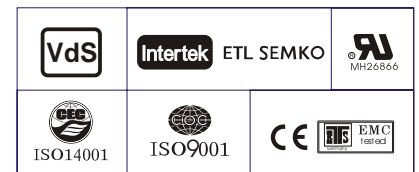
### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	18.0AH	
Dimension	Length	181.5±1mm (7.14 inches)
	Width	77±1mm (3.03 inches)
	Container Height	167.5±1mm (6.59 inches)
	Total Height (with Terminal)	167.5±1mm (6.59 inches)
Approx Weight	Approx 5.32kg (11.73lbs)	
Terminal	T3	
Container Material	ABS	
Rated Capacity	18.0 AH/0.90A	(20hr , 1.80V/cell, 25°C/77°F)
	16.7 AH/1.67A	(10hr, 1.80V/cell, 25°C/77°F)
	15.3 AH/3.06A	(5hr, 1.75V/cell, 25°C/77°F)
	13.8 AH/4.59A	(3hr, 1.75V/cell, 25°C/77°F)
	11.3 AH/11.3A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	270A (5s)	
Internal Resistance	Approx 16mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~120°F)
	Charge	0~40°C (5~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 5.4A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	series 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	34.3	26.3	21.8	18.9	14.6	10.7	9.05	5.35	4.19	3.41	2.78	2.41	1.94	1.62	0.89
1.80V/cell	46.0	33.6	26.3	22.3	17.2	12.5	10.1	5.84	4.51	3.64	2.98	2.58	2.06	1.67	0.90
1.75V/cell	51.9	37.0	28.8	24.0	17.9	13.0	10.6	6.06	4.59	3.72	3.06	2.66	2.10	1.72	0.91
1.70V/cell	57.1	40.3	30.7	25.2	18.6	13.5	10.9	6.21	4.72	3.82	3.14	2.71	2.13	1.75	0.93
1.65V/cell	63.0	43.5	32.7	26.8	19.6	13.8	11.2	6.30	4.92	3.95	3.22	2.77	2.16	1.79	0.94
1.60V/cell	69.5	47.2	34.9	28.5	20.7	14.4	11.3	6.57	5.07	4.07	3.33	2.83	2.18	1.81	0.95

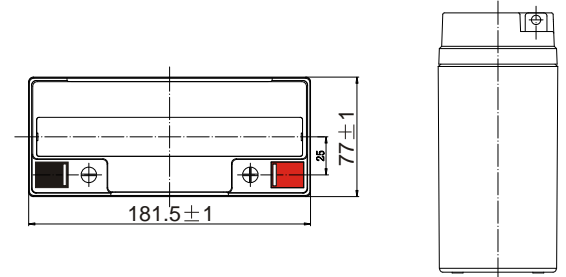
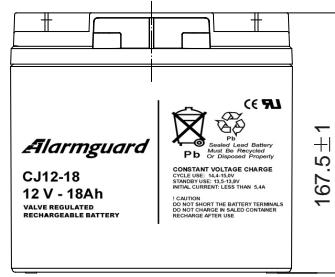
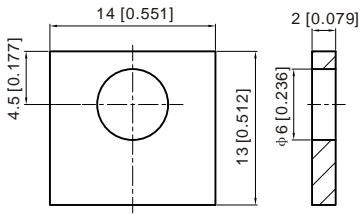
### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	62.7	48.6	40.7	35.5	27.8	20.6	17.5	10.4	8.16	6.66	5.45	4.74	3.84	3.21	1.77
1.80V/cell	83.2	61.4	48.5	41.4	32.3	23.8	19.5	11.3	8.74	7.07	5.82	5.06	4.06	3.31	1.78
1.75V/cell	91.8	66.4	52.3	44.1	33.2	24.5	20.3	11.6	8.86	7.20	5.95	5.18	4.12	3.39	1.80
1.70V/cell	98.3	70.7	55.1	46.0	34.4	25.4	20.8	11.9	9.09	7.38	6.09	5.28	4.17	3.46	1.83
1.65V/cell	106.9	75.6	58.1	48.5	36.0	25.8	21.2	12.0	9.44	7.61	6.24	5.38	4.23	3.52	1.85
1.60V/cell	115.2	80.2	61.1	51.1	37.7	26.7	21.3	12.5	9.68	7.82	6.42	5.48	4.26	3.56	1.86

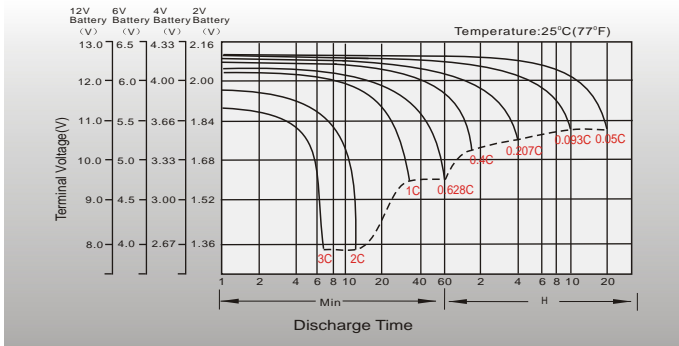
# Dimensions

## T3 Terminal

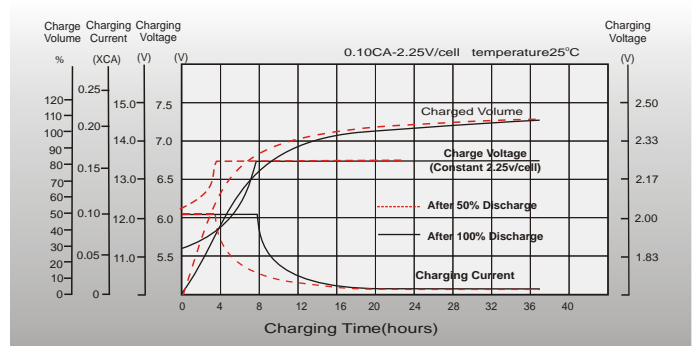
Unit: mm [inches]



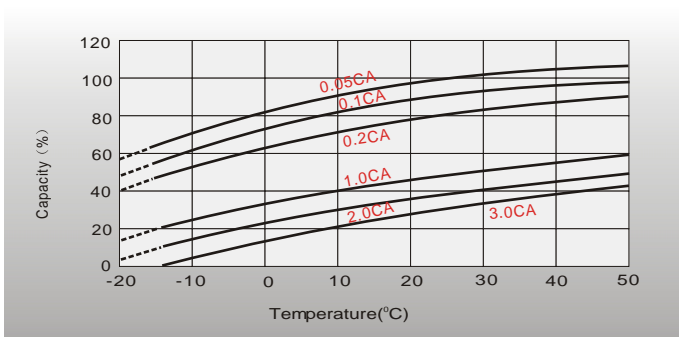
## Discharge Characteristics



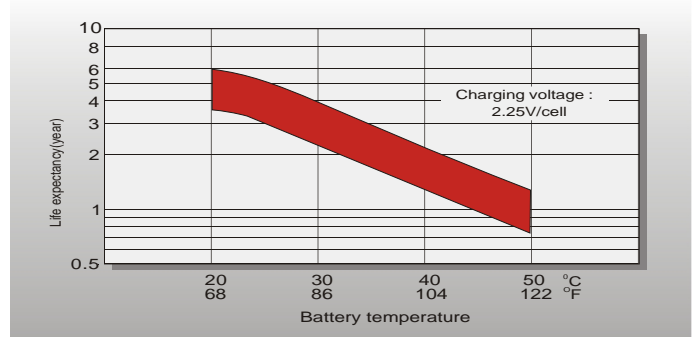
## Float Charging Characteristics



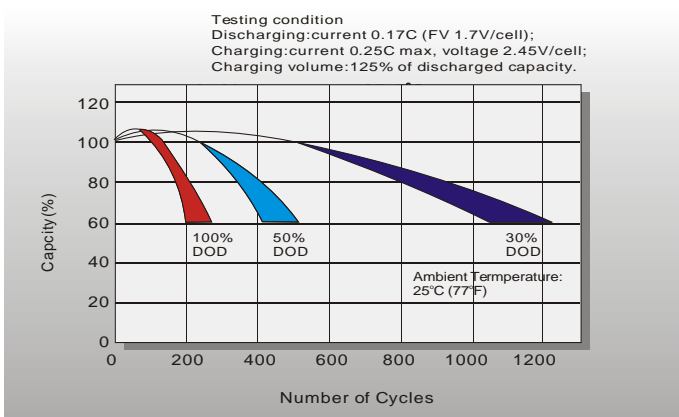
## Temperature Effects in Relation to Batter Capacity



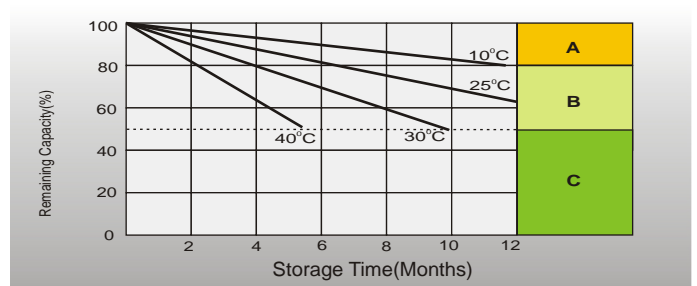
## Effect of Temperature on Long Term Float Life



## 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. Optional charging way as 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 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.