

### Specification

Nominal Voltage	6V	
Nominal Capacity (20HR)	12AH	
Dimension	Length	151±1mm (5.95 inches)
	Width	51±1mm (2.01 inches)
	Container Height	94±1mm (3.70 inches)
	Total Height (with Terminal)	100±1mm (3.94 inches)
	Terminal	T1 / T2
Approximate Weight	1.95 Kg (4.30 lbs)	
Container Material	ABS	
Rated Capacity	12.0AH/5.83A	(20hr, 1.80V/cell, 25°C/77°F)
	11.0AH/1.10A	(10hr, 1.80V/cell, 25°C/77°F)
	9.54AH/1.91A	(5hr, 1.75V/cell, 25°C/77°F)
	8.70AH/2.90A	(3hr, 1.75V/cell, 25°C/77°F)
	6.77AH/6.77A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	165A (5s)	
Internal Resistance	Approx 15.0mΩ	
Operating Temp. Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°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 3.3A. Voltage 7.2V~7.5V at 25°C (77°F) Temp. Coefficient -15mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 6.75V~6.9V at 25°C (77°F) Temp. Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	National Battery batteries may be stored for up to 1 year at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Uninterruptible Power Supply (UPS)
- ◆ Electric wheelchairs, scooters, bikes
- ◆ Electronic apparatus and equipment
- ◆ Alarm and security systems
- ◆ Emergency first responder equipment
- ◆ Emergency lighting
- ◆ Medical devices
- ◆ Electric carts
- ◆ Telecom equipment
- ◆ Switchgear
- ◆ Solar power systems



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	14.2	11.8	10.1	8.24	6.23	5.23	3.34	2.64	2.14	1.73	1.52	1.22	1.04	0.578
1.80V/cell	18.1	14.3	11.9	9.73	7.25	5.86	3.64	2.84	2.29	1.86	1.63	1.29	1.10	0.583
1.75V/cell	19.9	15.6	12.8	10.1	7.53	6.13	3.78	2.90	2.34	1.91	1.67	1.31	1.11	0.589
1.70V/cell	21.7	16.7	13.5	10.5	7.83	6.32	3.93	2.98	2.40	1.96	1.71	1.33	1.12	0.600
1.65V/cell	23.4	17.7	14.3	11.1	8.02	6.53	4.04	3.10	2.48	2.01	1.75	1.35	1.15	0.607
1.60V/cell	25.4	19.0	15.3	11.7	8.36	6.77	4.17	3.20	2.56	2.08	1.78	1.37	1.16	0.611

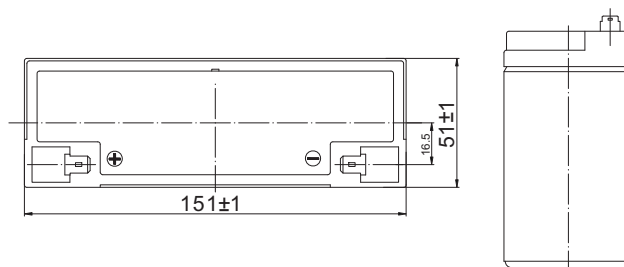
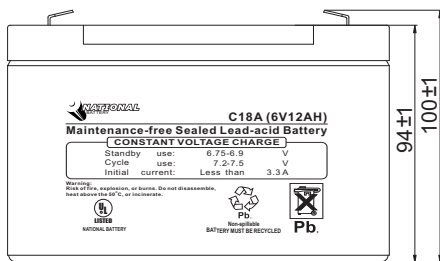
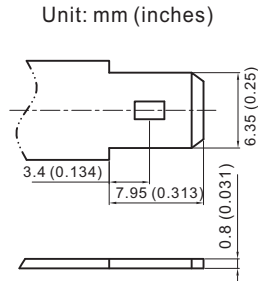
### Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.7	22.5	19.4	16.0	12.2	10.27	6.60	5.25	4.26	3.46	3.04	2.44	2.09	1.164
1.80V/cell	33.7	26.8	22.6	18.6	14.1	11.4	7.15	5.61	4.53	3.69	3.25	2.59	2.21	1.174
1.75V/cell	36.5	29.0	24.1	19.2	14.5	11.9	7.39	5.69	4.62	3.78	3.33	2.62	2.23	1.183
1.70V/cell	38.9	30.5	25.1	19.8	15.0	12.3	7.67	5.84	4.73	3.87	3.39	2.66	2.25	1.205
1.65V/cell	41.6	32.2	26.5	20.7	15.2	12.6	7.84	6.06	4.87	3.96	3.46	2.69	2.29	1.219
1.60V/cell	44.1	33.9	27.9	21.8	15.8	13.0	8.06	6.22	5.01	4.08	3.52	2.71	2.32	1.223

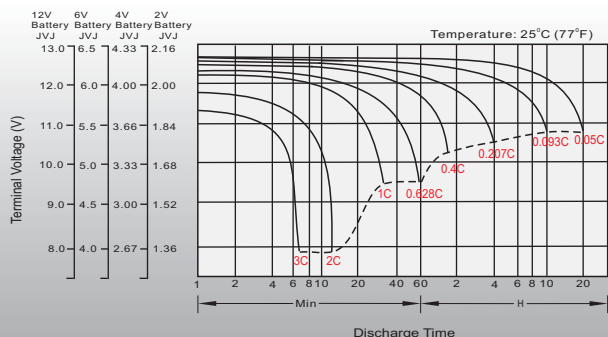
# Dimensions

## T2 Terminal

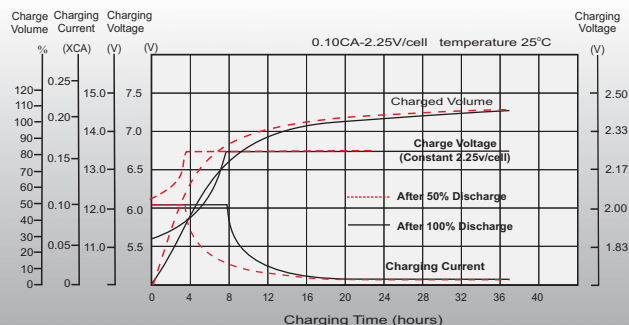
Unit: mm (inches)



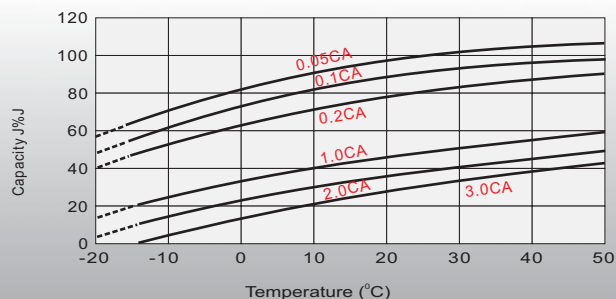
## Discharge Characteristics



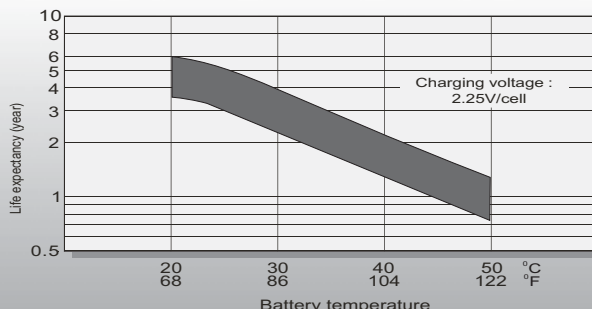
## Float Charging Characteristics



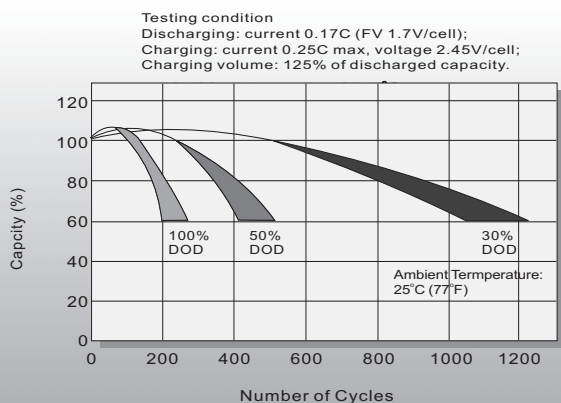
## Temperature Effects in Relation to Batter Capacity



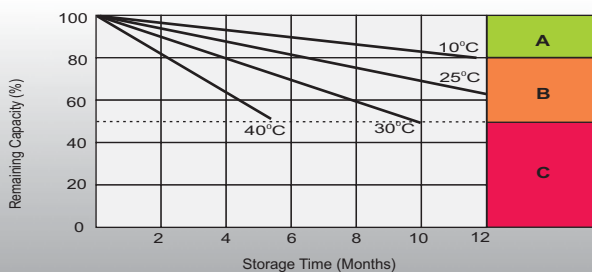
## Effect of Temperature on Long Term Float Life



## 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.

## Contact Information



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