

Specification

Nominal Voltage	6V	
Nominal Capacity (20HR)	4.5AH	
Dimension	Length	70±1mm (2.76 inches)
	Width	47±1mm (1.85 inches)
	Container Height	100±2mm (3.94 inches)
	Total Height (with Terminal)	106±2mm (4.17 inches)
Approximate Weight	0.73 kg (1.61 lbs)	
Terminal	T1	
Container Material	ABS	
Rated Capacity	4.50 AH/0.200A	(20hr, 1.80V/cell, 25°C/77°F)
	3.72 AH/0.372A	(10hr, 1.80V/cell, 25°C/77°F)
	3.40 AH/0.68A	(5hr, 1.75V/cell, 25°C/77°F)
	3.06 AH/1.02A	(3hr, 1.75V/cell, 25°C/77°F)
	2.51 AH/2.51A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	60A (5s)	
Internal Resistance	Approx 45mΩ	
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 1.2A. 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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	7.62	5.85	4.85	4.19	3.24	2.39	2.01	1.19	0.93	0.76	0.62	0.54	0.432	0.361	0.198
1.80V/cell	10.2	7.47	5.85	4.95	3.82	2.78	2.25	1.30	1.00	0.81	0.66	0.57	0.458	0.372	0.200
1.75V/cell	11.5	8.21	6.39	5.33	3.97	2.88	2.36	1.35	1.02	0.83	0.68	0.59	0.466	0.382	0.202
1.70V/cell	12.7	8.95	6.83	5.6	4.13	3.00	2.43	1.38	1.05	0.85	0.70	0.60	0.473	0.39	0.206
1.65V/cell	14.0	9.66	7.26	5.95	4.36	3.07	2.49	1.40	1.09	0.88	0.72	0.62	0.480	0.398	0.208
1.60V/cell	15.4	10.5	7.76	6.34	4.60	3.20	2.51	1.46	1.13	0.90	0.74	0.63	0.485	0.402	0.210

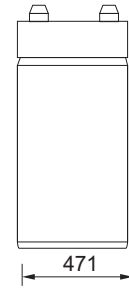
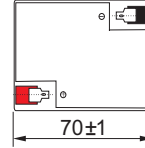
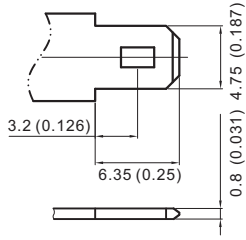
Constant Power Discharge (Watts) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	13.9	10.8	9.04	7.90	6.17	4.59	3.88	2.31	1.81	1.48	1.21	1.05	0.853	0.714	0.392
1.80V/cell	18.5	13.6	10.8	9.20	7.17	5.29	4.32	2.50	1.94	1.57	1.29	1.12	0.902	0.735	0.396
1.75V/cell	20.4	14.8	11.6	9.80	7.39	5.44	4.50	2.59	1.97	1.60	1.32	1.15	0.915	0.754	0.399
1.70V/cell	21.9	15.7	12.2	10.2	7.65	5.64	4.63	2.65	2.02	1.64	1.35	1.17	0.927	0.768	0.406
1.65V/cell	23.8	16.8	12.9	10.8	8.00	5.73	4.70	2.67	2.10	1.69	1.39	1.20	0.939	0.783	0.411
1.60V/cell	25.6	17.8	13.6	11.4	8.39	5.94	4.72	2.77	2.15	1.74	1.43	1.22	0.947	0.790	0.413

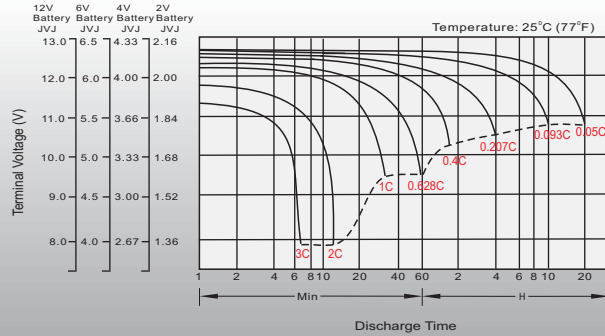
Dimensions

T1 Terminal

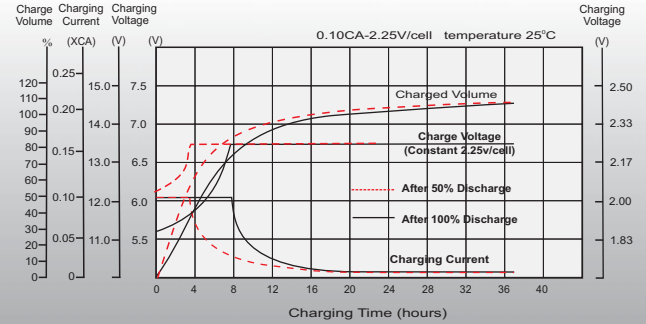
Unit: mm (inches)



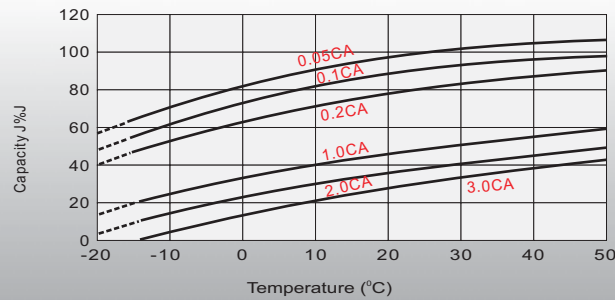
Discharge Characteristics



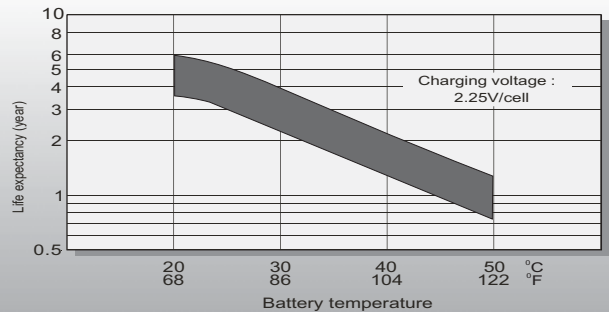
Float Charging Characteristics



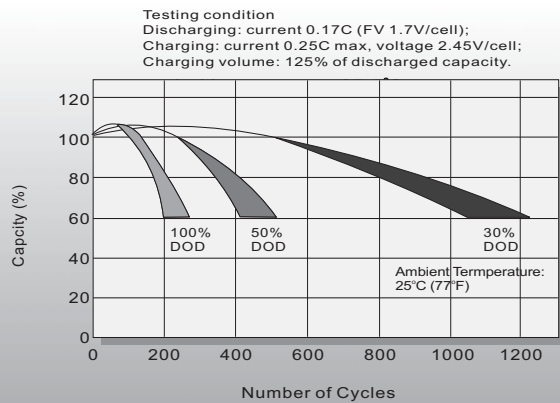
Temperature Effects in Relation to Batter Capacity



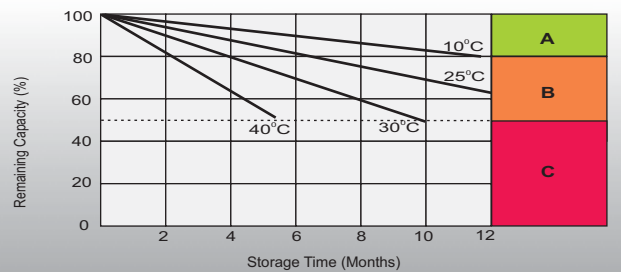
Effect of Temperature on Long Term Float Life



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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