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Batteries

6V 7Ah Sealed

01S-C6V7

SPECIFICATIONS

Nominal Voltage	6V	
Nominal Capacity (20HR)	7AH	
Dimension	Length	151±1mm (5.94 inches)
	Width	34±1mm (1.34 inches)
	Container Height	94±1mm (3.70 inches)
	Total Height (with Terminal)	100±1mm (3.94 inches)
	Approximate Weight	1.15 kg (2.54 lbs)
Terminal	T1 / T2	
Container Material	ABS	
Rated Capacity	7.00 AH/0.350A	(20hr, 1.80V/cell, 25°C/77°F)
	6.51 AH/0.651A	(10hr, 1.80V/cell, 25°C/77°F)
	5.95 AH/1.19A	(5hr, 1.75V/cell, 25°C/77°F)
	5.37 AH/1.79A	(3hr, 1.75V/cell, 25°C/77°F)
	4.40 AH/4.40A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	105A (5s)	
Internal Resistance	Approx 15mΩ	
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 2.1. 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 (77F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	13.3	10.2	8.48	7.33	5.67	4.18	3.52	2.08	1.63	1.32	1.08	0.94	0.756	0.631	0.347
1.80V/cell	17.9	13.1	10.2	8.67	6.69	4.86	3.94	2.27	1.75	1.41	1.16	1.01	0.802	0.651	0.350
1.75V/cell	20.2	14.4	11.2	9.32	6.94	5.04	4.13	2.36	1.79	1.45	1.19	1.03	0.816	0.669	0.354
1.70V/cell	22.2	15.7	11.9	9.80	7.23	5.24	4.26	2.42	1.83	1.48	1.22	1.05	0.827	0.682	0.360
1.65V/cell	24.5	16.9	12.7	10.4	7.63	5.37	4.35	2.45	1.91	1.54	1.25	1.08	0.840	0.696	0.365
1.60V/cell	27.0	18.4	13.6	11.1	8.05	5.60	4.40	2.56	1.97	1.58	1.30	1.10	0.848	0.704	0.367

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	24.4	18.9	15.8	13.8	10.8	8.03	6.79	4.04	3.18	2.59	2.12	1.84	1.492	1.250	0.686
1.80V/cell	32.4	23.9	18.9	16.1	12.6	9.26	7.57	4.38	3.40	2.75	2.26	1.97	1.578	1.286	0.692
1.75V/cell	35.7	25.8	20.3	17.2	12.9	9.52	7.88	4.53	3.45	2.80	2.31	2.02	1.602	1.319	0.698
1.70V/cell	38.2	27.5	21.4	17.9	13.4	9.86	8.10	4.63	3.54	2.87	2.37	2.05	1.622	1.345	0.710
1.65V/cell	41.6	29.4	22.6	18.9	14.0	10.0	8.23	4.67	3.67	2.96	2.43	2.09	1.644	1.370	0.719
1.60V/cell	44.8	31.2	23.8	19.9	14.7	10.4	8.26	4.85	3.76	3.04	2.50	2.13	1.656	1.383	0.722



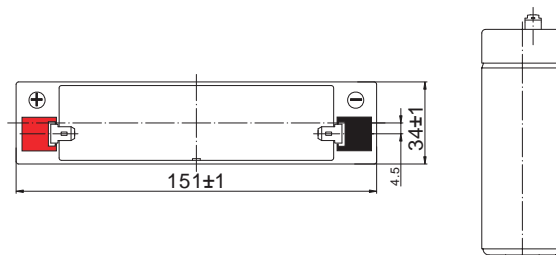
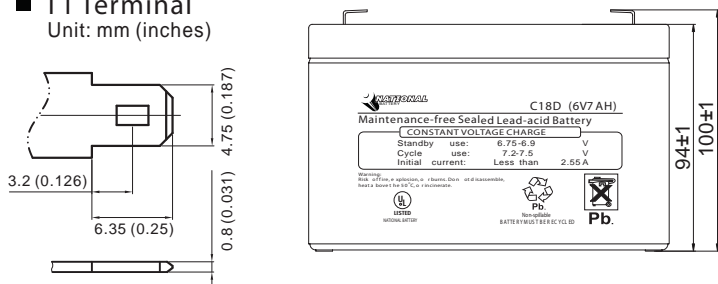
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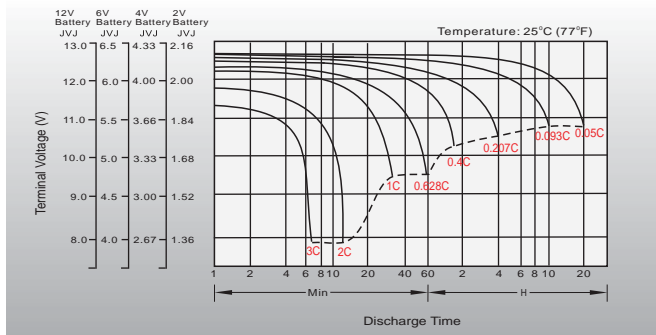
6V 7Ah Sealed Lead Acid

DIMENSIONS

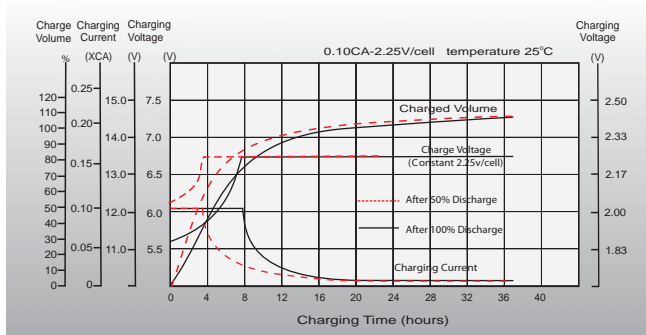
■ T1 Terminal
Unit: mm (inches)



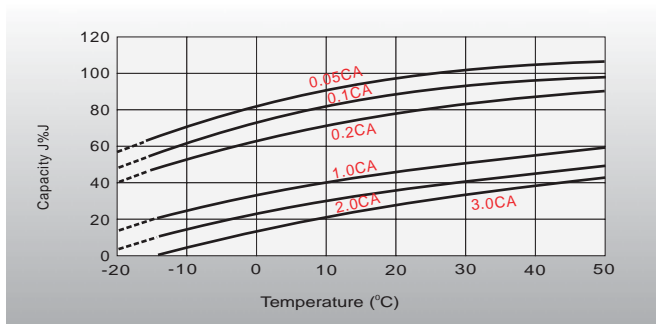
DISCHARGE CHARACTERISTICS



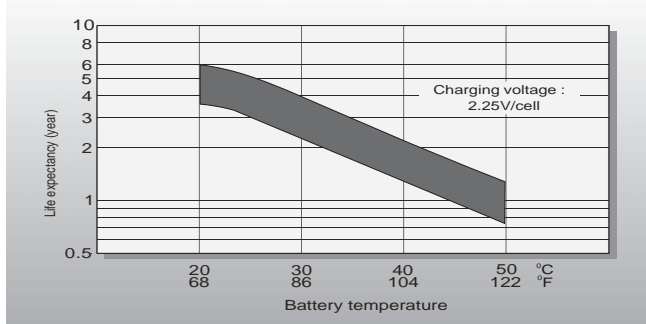
FLOAT CHARGING CHARACTERISTICS



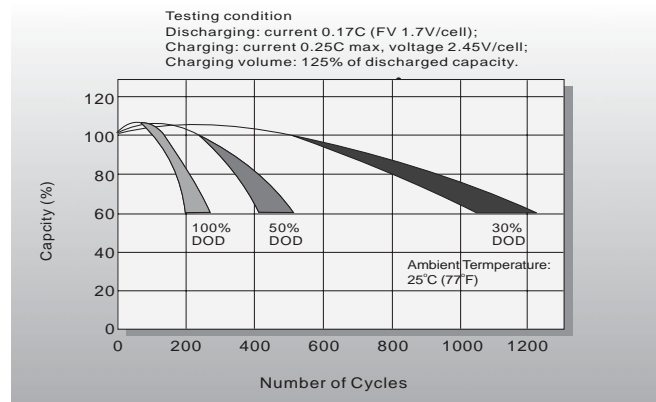
TEMP. EFFECTS IN RELATION TO BATTERY CAPACITY



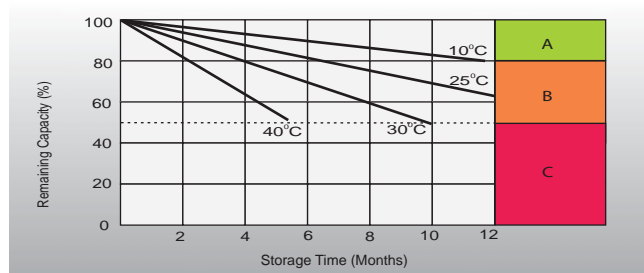
EFFECTS OF TEMP. ON LONG TERM FLOAT LIFE



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.