

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	7.0AH	
Dimension	Length	151±2mm (5.95 inches)
	Width	65±1mm (2.56 inches)
	Container Height	93.5±1mm (3.70 inches)
	Total Height (with Terminal)	99±1mm (3.92 inches)
Approx Weight	Approx 2.45 Kg (5.40 lbs)	
Terminal	T1 / T2	
Container Material	ABS	
Rated Capacity	7.42AH/0.371A	(20hr, 1.80V/cell, 25°C/77°F)
	7.00AH/0.700A	(10hr, 1.80V/cell, 25°C/77°F)
	6.07AH/1.21A	(5hr, 1.75V/cell, 25°C/77°F)
	5.53AH/1.84A	(3hr, 1.75V/cell, 25°C/77°F)
	4.31AH/4.31A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	105.0A (5s)	
Internal Resistance	Approx 18.0mΩ	
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 2.1A. 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	LL 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

- ◆ UPS and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and powerstations
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply

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	9.03	7.53	6.42	5.25	3.97	3.33	2.12	1.68	1.36	1.10	0.97	0.77	0.661	0.368
1.80V/cell	11.5	9.10	7.59	6.19	4.61	3.73	2.32	1.81	1.46	1.18	1.04	0.82	0.700	0.371
1.75V/cell	12.7	9.9	8.17	6.43	4.79	3.90	2.40	1.84	1.49	1.21	1.07	0.84	0.707	0.375
1.70V/cell	13.8	10.6	8.58	6.69	4.98	4.02	2.50	1.89	1.53	1.24	1.09	0.85	0.714	0.382
1.65V/cell	14.9	11.3	9.12	7.06	5.10	4.16	2.57	1.98	1.58	1.28	1.11	0.86	0.729	0.386
1.60V/cell	16.2	12.1	9.71	7.45	5.32	4.31	2.65	2.04	1.63	1.32	1.14	0.87	0.736	0.389

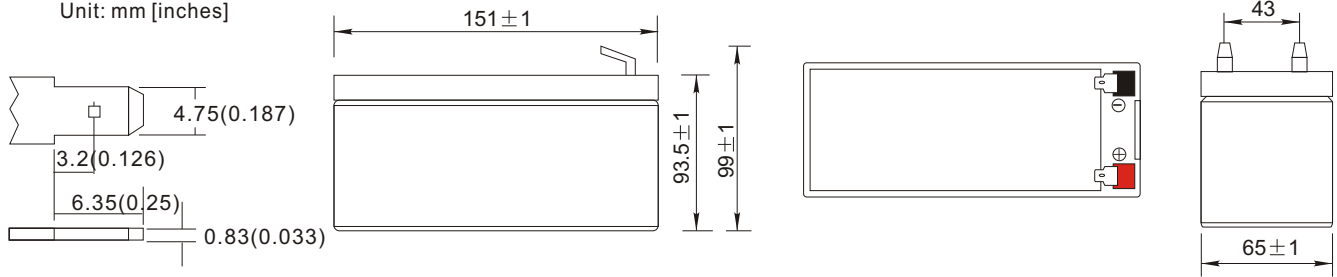
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.0	14.3	12.3	10.2	7.76	6.53	4.20	3.34	2.71	2.20	1.93	1.55	1.33	0.741
1.80V/cell	21.5	17.1	14.4	11.8	8.96	7.28	4.55	3.57	2.88	2.35	2.07	1.65	1.41	0.747
1.75V/cell	23.2	18.4	15.3	12.2	9.21	7.58	4.70	3.62	2.94	2.40	2.12	1.67	1.42	0.753
1.70V/cell	24.7	19.4	16.0	12.6	9.55	7.80	4.88	3.72	3.01	2.46	2.16	1.69	1.43	0.767
1.65V/cell	26.5	20.5	16.8	13.2	9.70	8.00	4.99	3.86	3.10	2.52	2.20	1.71	1.46	0.776
1.60V/cell	28.1	21.5	17.7	13.8	10.05	8.24	5.13	3.96	3.19	2.60	2.24	1.73	1.47	0.779

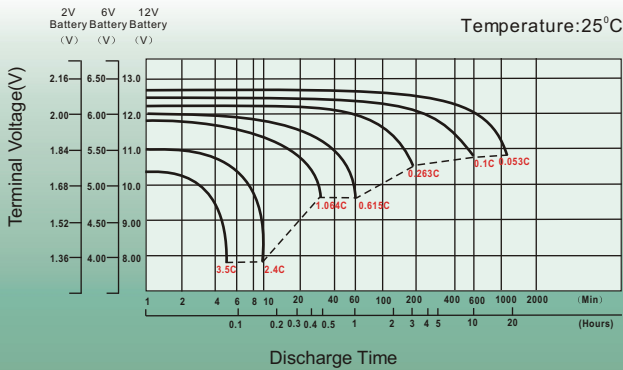
Dimensions

T1 Terminal

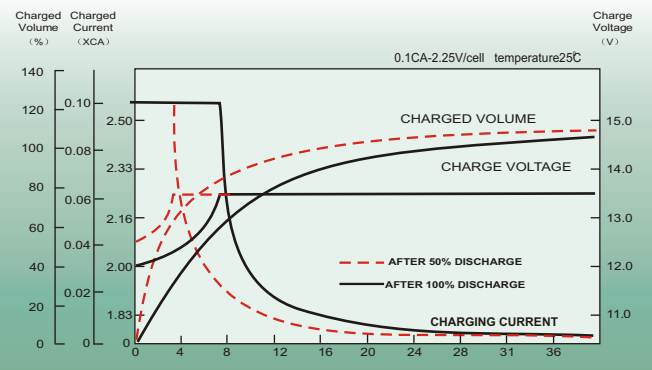
Unit: mm [inches]



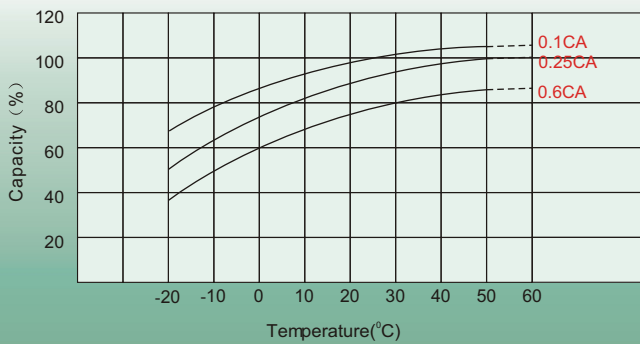
Discharge Characteristics



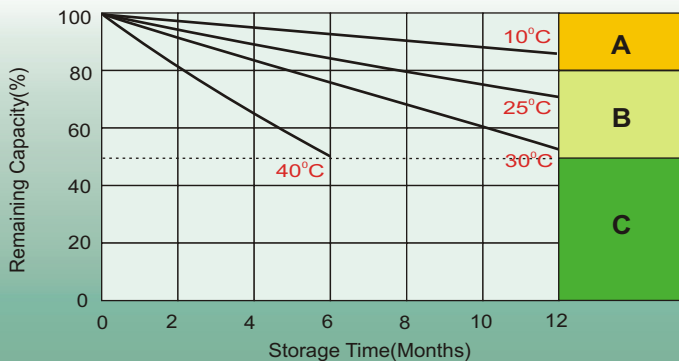
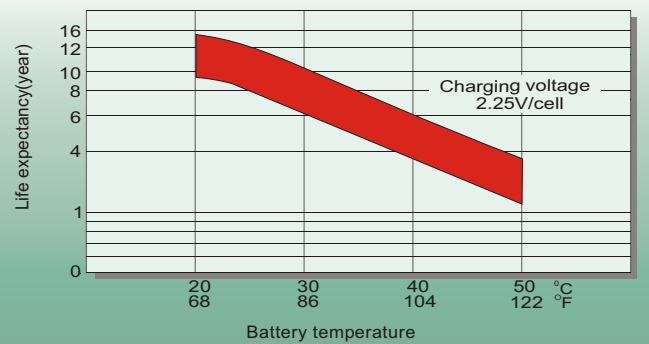
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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 volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8-10hours 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.