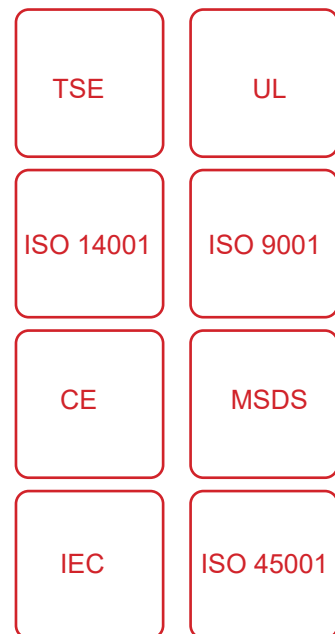


### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	7AH	
Dimensions	Length	151±2mm (5.95 inches)
	Width	65±1mm (2.56 inches)
	Container Height	93.5±1mm (3.68 inches)
	Total Height (with Terminal)	99±1mm (3.90 inches)
Approx Weight	Approx 2.12 kg	Terminal: Stainless
Battery Life	10 Years	
Container Material	ABS	
Rated Capacity	7.20 AH/0.36A	(20hr, 1.80V/cell, 25°C/77°F)
	6.70 AH/0.67A	(10hr, 1.80V/cell, 25°C/77°F)
	6.12 AH/1.22A	(5hr, 1.75V/cell, 25°C/77°F)
	5.37 AH/1.79A	(3hr, 1.75V/cell, 25°C/77°F)
	4.49 AH/4.49A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	108A (5s)	
Internal Resistance	Approx 18mΩ	
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 2.16A. 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	DS 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.	



### 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	16.6	12.7	10.2	8.86	6.52	4.78	3.82	2.21	1.67	1.37	1.15	1.00	0.796	0.658	0.355
1.80V/cell	19.8	14.0	11.3	9.52	7.00	5.07	4.06	2.32	1.72	1.41	1.19	1.03	0.814	0.672	0.360
1.75V/cell	22.1	15.3	12.1	10.01	7.30	5.25	4.17	2.40	1.77	1.44	1.21	1.05	0.828	0.682	0.367
1.70V/cell	24.1	16.4	12.9	10.52	7.57	5.41	4.30	2.45	1.81	1.47	1.23	1.06	0.840	0.692	0.372
1.65V/cell	26.2	17.3	13.5	11.0	7.80	5.52	4.37	2.49	1.84	1.49	1.25	1.08	0.850	0.699	0.375
1.60V/cell	27.6	18.0	13.9	11.2	7.93	5.62	4.44	2.53	1.87	1.51	1.27	1.09	0.858	0.705	0.378

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

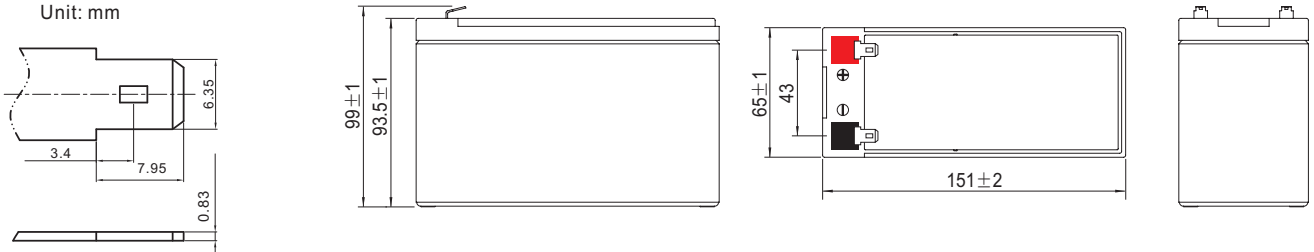
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	31.5	24.2	19.7	17.3	12.8	9.42	7.56	4.40	3.33	2.74	2.32	2.02	1.61	1.333	0.721
1.80V/cell	37.2	26.7	21.8	18.4	13.7	9.95	8.02	4.61	3.43	2.81	2.37	2.06	1.64	1.355	0.728
1.75V/cell	41.1	28.9	23.1	19.3	14.2	10.3	8.22	4.74	3.51	2.87	2.42	2.10	1.66	1.372	0.740
1.70V/cell	44.5	30.7	24.4	20.2	14.7	10.6	8.45	4.84	3.58	2.92	2.45	2.12	1.68	1.386	0.746
1.65V/cell	47.8	32.1	25.4	21.0	15.0	10.7	8.54	4.89	3.63	2.96	2.48	2.15	1.70	1.398	0.751
1.60V/cell	49.8	33.0	25.9	21.2	15.2	10.8	8.63	4.95	3.67	2.98	2.51	2.16	1.71	1.406	0.755

Specifications subject to change without notice.

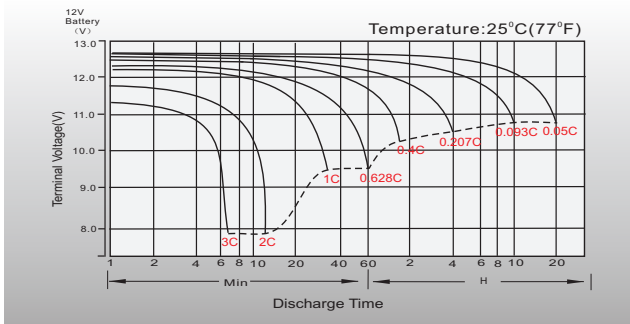
#### Dimensions

##### T2 Terminal

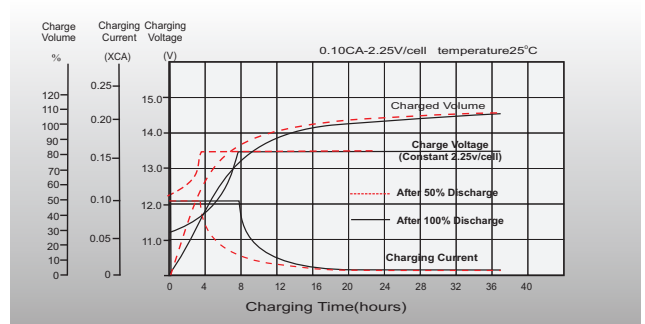
Unit: mm



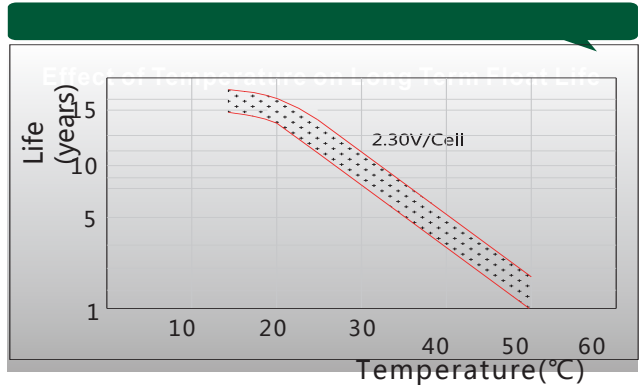
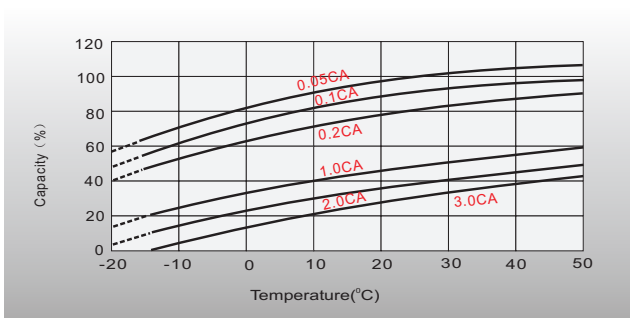
#### Discharge Characteristics



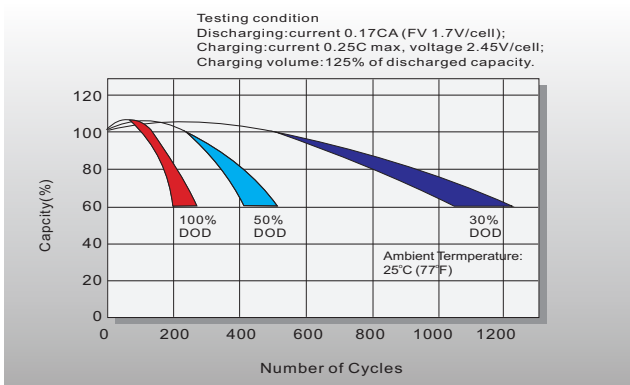
#### Float Charging Characteristics



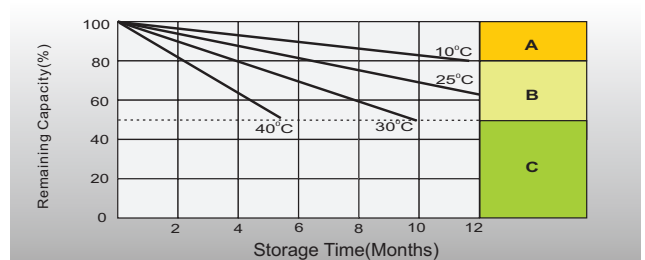
#### Temperature Effects in Relation to Battery Capacity



#### 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.