

Specifications

Nominal Voltage		12 V
Capacity (25℃)	20HR(10.5V)	12Ah
	10HR(10.5V)	11Ah
	1HR(9.60V)	7.8Ah
Dimension	Length	151±1.5mm (5.94inch)
	Width	98±1mm (3.86inch)
	Height	95±1mm (3.74inch)
	Total Height	101±1mm (3.98inch)
Approx. Weight		3.5kg (7.92lbs)±5%
Terminal type		T2/T1
Internal resistance (Fully charged, 25℃)		Approx. 19mΩ
Capacity affected by temperature (20HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25℃±3℃(77°F±5°F)
Operating temperature range	Discharge	-15℃~50℃(5°F~122°F)
	Charge	-10℃~50℃(14°F~122°F)
	Storage	-20℃~50℃(-4°F~122°F)
Float charging voltage(25℃)		13.60 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 14.90V Temperature compensation: -30mV/℃
Maximum charging current		3.6A
Terminal material		Copper
Maximum discharge current		180A(5 sec.)

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

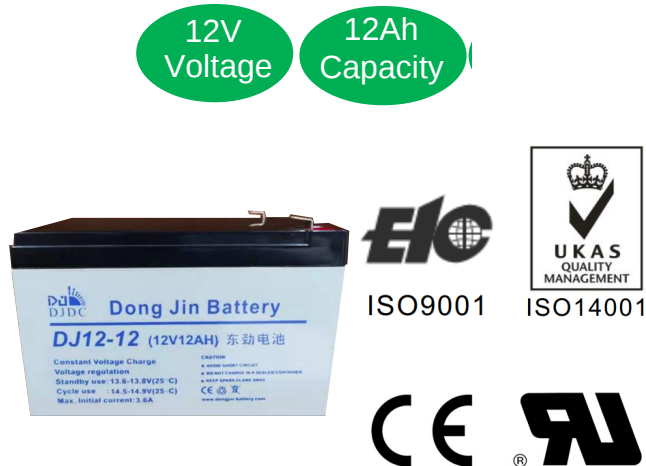
Constant Current Discharge Characteristics (A, 25℃)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	10HR	20HR
1.60V	47.34	30.88	22.78	13.18	7.62	4.49	3.27	2.6	2.2	1.2	0.625
1.65V	45.63	29.95	22.18	12.9	7.48	4.43	3.22	2.57	2.17	1.18	0.62
1.70V	43.4	28.75	21.39	12.51	7.29	4.34	3.17	2.53	2.14	1.17	0.613
1.75V	40.55	27.18	20.38	12.01	7.04	4.22	3.09	2.47	2.09	1.15	0.604
1.80V	36.95	25.19	19.06	11.36	6.72	4.07	2.99	2.39	2.03	1.12	0.592

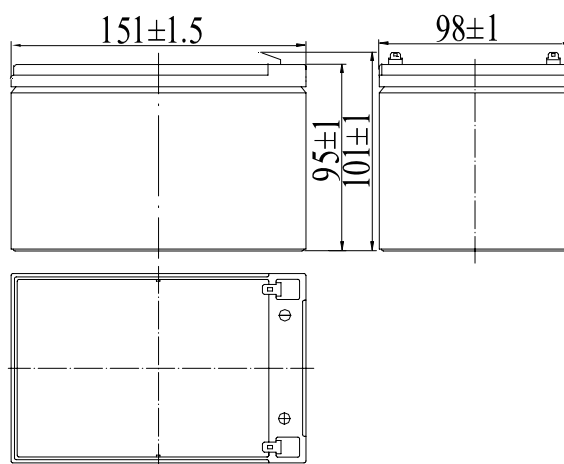
Constant Power Discharge Characteristics (Watt, 25℃)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	10HR	20HR
1.60V	81.48	53.26	40.42	24.3	14.46	8.65	6.33	5.06	4.3	2.39	1.25
1.65V	80.63	53.05	40.19	24.12	14.34	8.58	6.29	5.03	4.27	2.37	1.24
1.70V	77.55	51.48	39.1	23.54	14.03	8.44	6.19	4.96	4.21	2.34	1.23
1.75V	73.75	49.56	37.78	22.83	13.62	8.25	6.07	4.87	4.14	2.3	1.21
1.80V	68.37	46.73	35.84	21.81	13.06	7.99	5.89	4.74	4.03	2.25	1.19

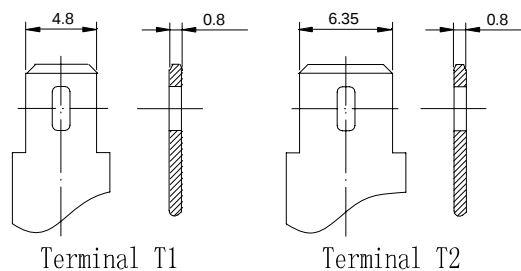
Note: The above characteristics data can be obtained within three charge/discharge cycles.



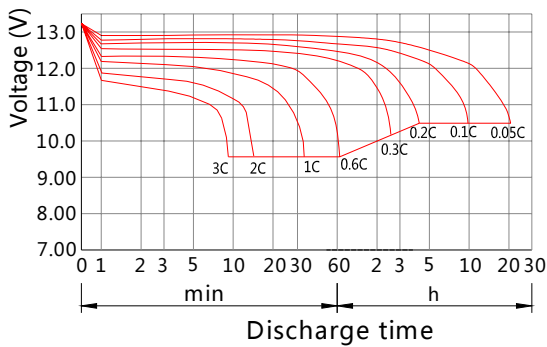
Dimensions



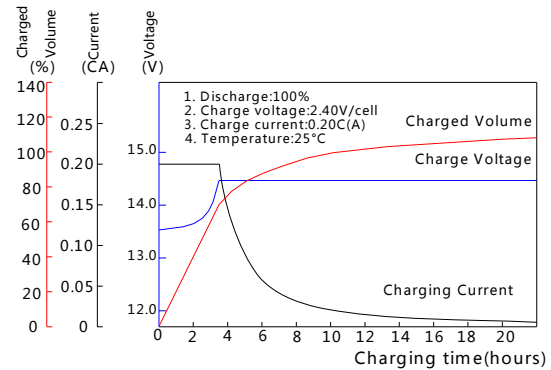
Terminal



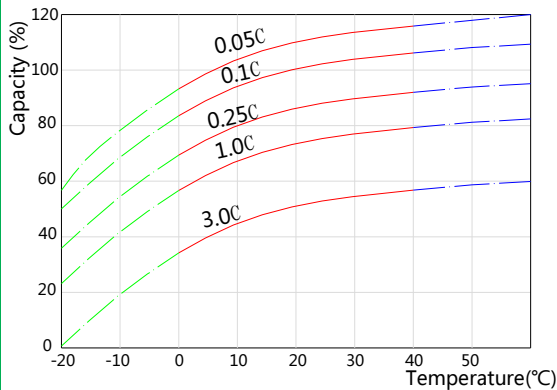
Discharge Characteristics(25°C)



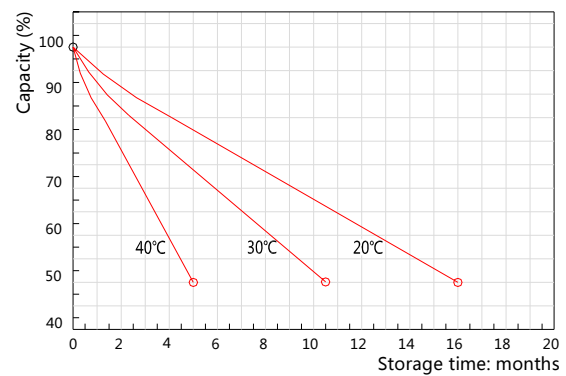
Charging Characteristics(25°C)



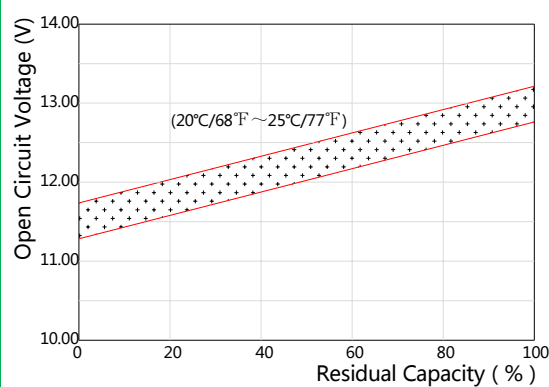
Effect of Temperature on Capacity



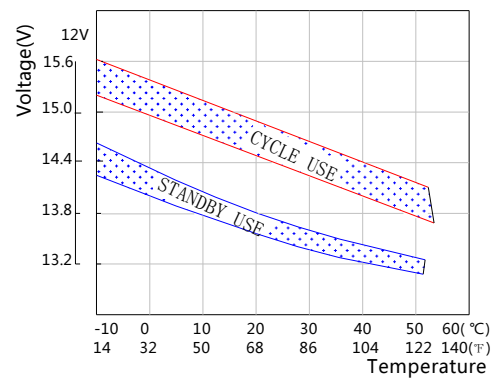
Self-discharge Characteristics



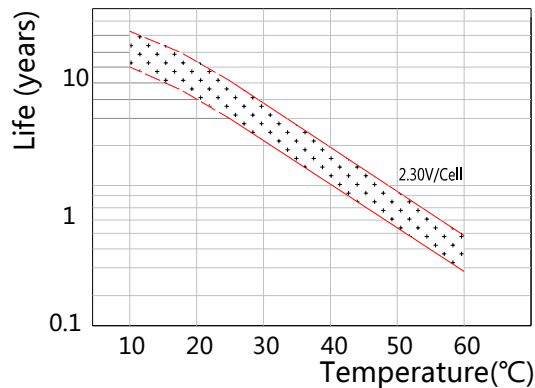
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

