

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	18Ah
	5HR(10.2V)	14.1Ah
	1HR(9.6V)	10.5Ah
Dimension	Length	181 ± 2mm (7.13inch)
	Width	77 ± 1mm (3.03inch)
	Height	167 ± 2mm (6.57inch)
	Total Height	167 ± 2mm (6.57inch)
Approx. Weight		5.5kg (12.1lbs) ± 4%
Terminal type		T8
Internal resistance (Fully charged, 25°C)		Approx. 16m Ω
Capacity affected by temperature (10HR)	40°C	103%
	25°C	100%
	0°C	88%
	-15°C	70%
Self-discharge (25°C)	3 month	Remaining Capacity: 94%
	6 month	Remaining Capacity: 88%
	12 month	Remaining Capacity: 75%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 55°C (5°F ~ 131°F)
	Charge	-10°C ~ 55°C (14°F ~ 131°F)
	Storage	-20°C ~ 55°C (-4°F ~ 131°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.10 to 14.40V Temperature compensation: -30mV/°C
Maximum charging current		3.6A
Terminal material		Copper
Maximum discharge current		180 A(5 sec.)
Designed floating life(20°C)		10 years

- ◆ Gelled electrolyte technology;
- ◆ PVC separator;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

**Constant Current Discharge Characteristics (A, 25°C)**

F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	24.3	16.8	10.5	6.12	4.32	3.40	2.84	2.43	1.89	1.69	0.92	---	---
9.90V	23.8	16.4	10.3	6.08	4.28	3.38	2.83	2.41	1.87	1.68	0.92	---	---
10.2V	22.9	15.9	10.1	6.03	4.27	3.35	2.81	2.39	1.87	1.68	0.91	0.401	---
10.5V	22.1	15.6	9.86	5.94	4.23	3.33	2.79	2.38	1.85	1.67	0.90	0.400	0.166
10.8V	20.9	15.0	9.56	5.80	4.10	3.22	2.70	2.30	1.80	1.66	0.90	0.400	0.166

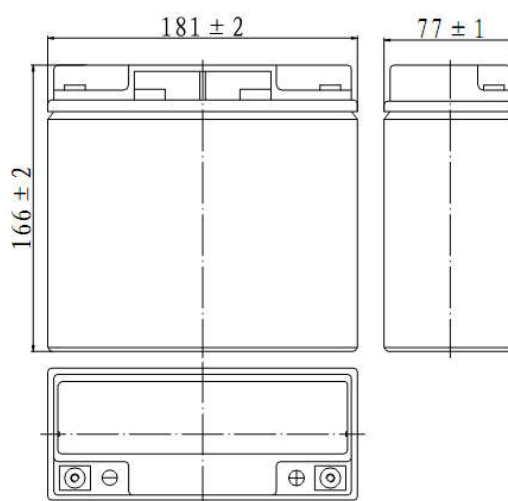
**Constant Power Discharge Characteristics (Watt, 25°C)**

F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	271	191	121	71.3	50.9	40.1	33.8	28.8	22.5	20.2	11.1	---	---
9.90V	265	187	119	70.7	50.8	40.0	33.7	28.6	22.5	20.2	11.1	---	---
10.2V	255	182	116	70.2	50.4	39.6	33.3	28.4	22.3	20.2	11.0	4.82	---
10.5V	246	177	114	69.1	50.0	39.4	33.1	28.3	22.1	20.0	10.9	4.79	2.00
10.8V	233	171	110	67.3	48.4	38.2	32.2	27.4	21.4	19.8	10.9	4.79	1.98

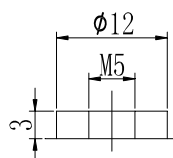
Note: The above characteristics data can be obtained within three charge/discharge cycles.



**Dimensions**

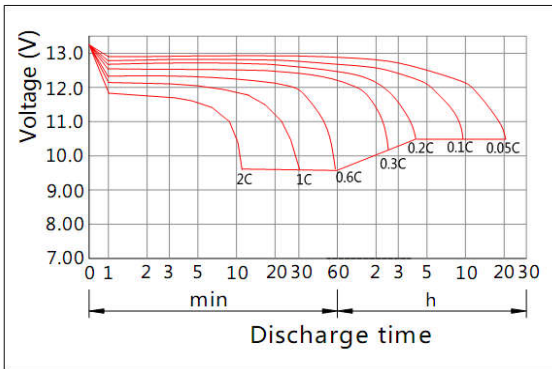


**Terminal**

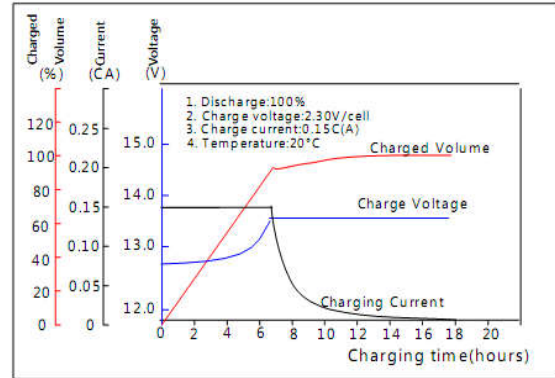


Terminal T8

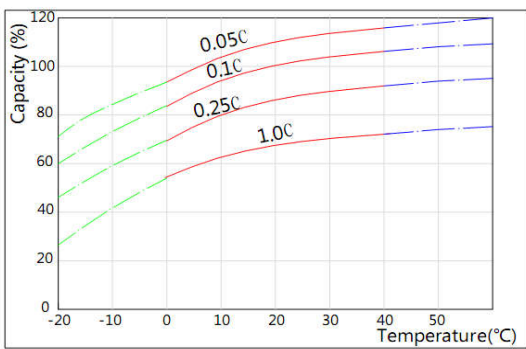
Discharge Characteristics(25°C)



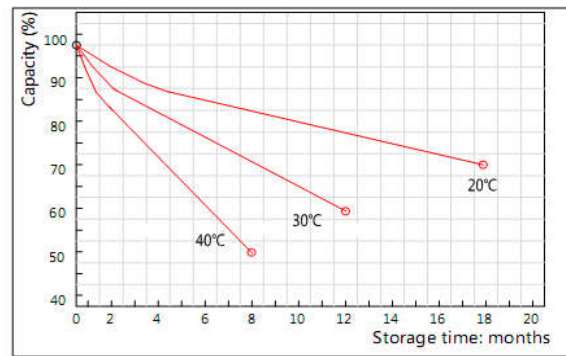
Charging Characteristics(25°C)



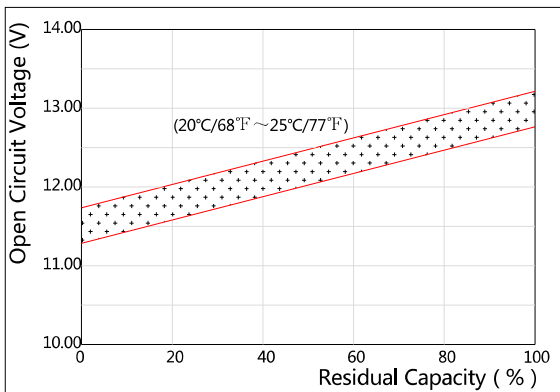
Effect of Temperature on Capacity



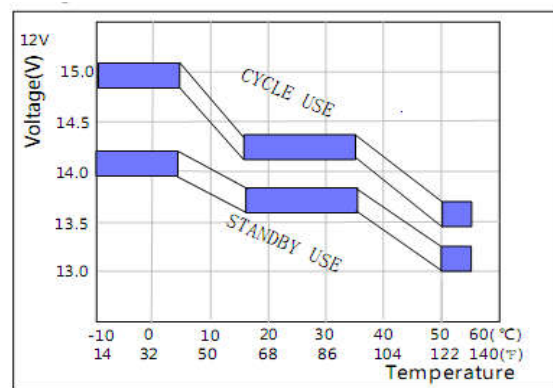
Self-discharge Characteristics



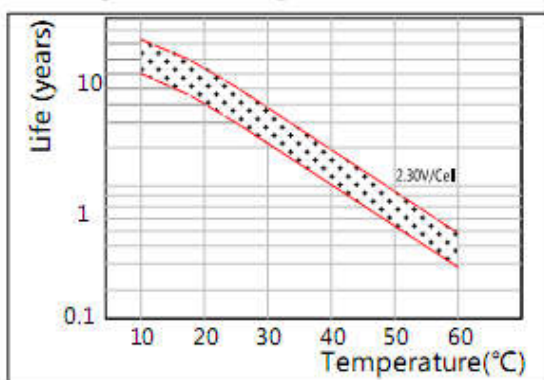
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D.(25°C)

