

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	20 Ah
	10HR(10.5V)	18.6Ah
	1HR(9.60V)	13Ah
Dimension	Length	181 ± 2mm (7.13inch)
	Width	77 ± 1mm (3.03inch)
	Height	167 ± 2mm (6.57inch)
	Total Height	167 ± 2mm (6.57inch)
Approx. Weight		5.6kg (12.4lbs) ± 4%
Terminal type		T3/T8
Internal resistance (Fully charged, 25°C)		Approx. 12m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		6A
Terminal material		Copper
Maximum discharge current		300A(5 sec.)
Designed floating life(20°C)		10years

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

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

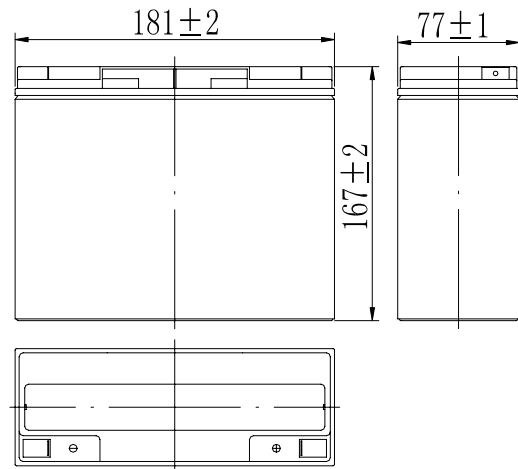
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	71.6	48.0	38.0	21.2	13.0	7.11	5.10	4.08	3.47	2.24	1.89	1.02
9.90V	69.3	46.6	37.1	20.8	12.8	7.06	5.07	4.06	3.45	2.23	1.88	1.01
10.2V	66.5	44.6	35.7	20.1	12.5	7.00	5.04	4.03	3.42	2.22	1.87	1.01
10.5V	63.6	42.7	34.5	19.7	12.2	6.90	5.00	4.00	3.40	2.20	1.86	1.00
10.8V	59.3	40.3	32.7	18.9	11.9	6.72	4.85	3.88	3.30	2.13	1.82	0.98

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

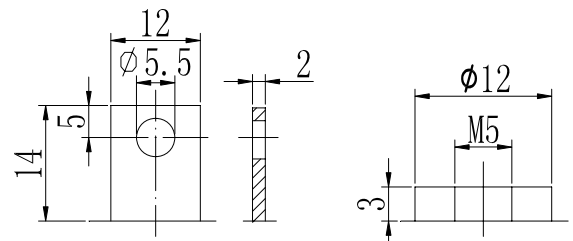
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	799	541	433	243	151	83.1	60.6	48.6	41.4	26.9	22.7	12.2
9.90V	774	525	423	238	148	82.6	60.2	48.3	41.2	26.8	22.6	12.1
10.2V	742	504	407	231	145	81.9	59.8	48.0	40.9	26.6	22.5	12.1
10.5V	710	482	393	225	142	80.7	59.4	47.6	40.6	26.4	22.3	12.0
10.8V	662	455	373	217	137	78.6	57.6	46.2	39.4	25.6	21.9	11.8

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

**Dimensions**



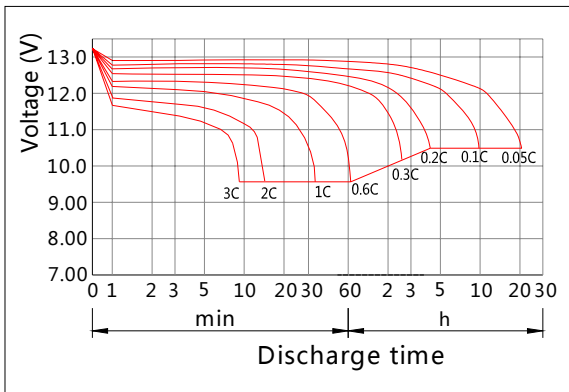
**Terminal**



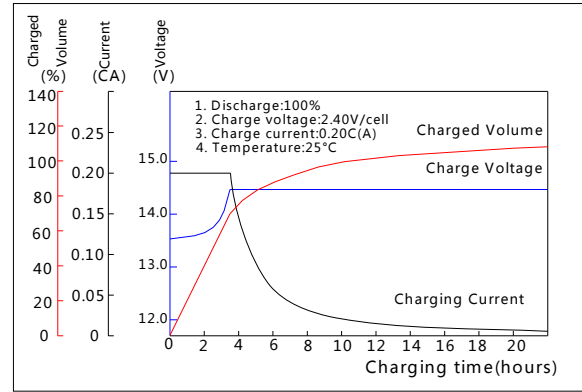
Terminal T3

Terminal T8

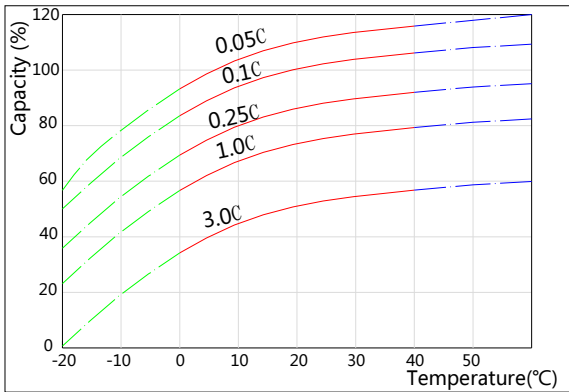
**Discharge Characteristics(25°C)**



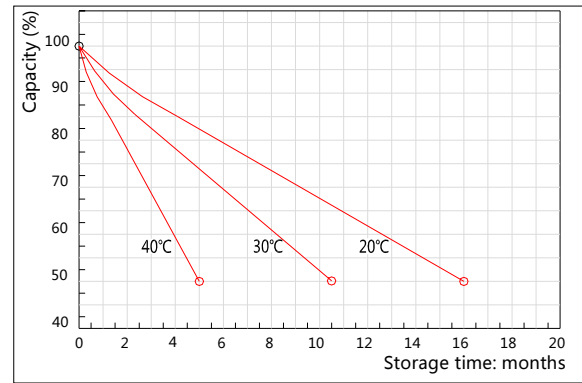
**Charging Characteristics(25°C)**



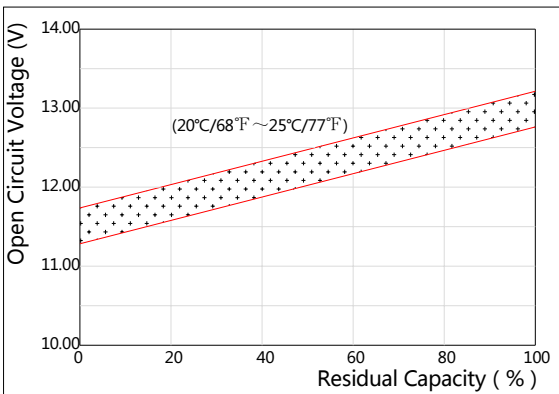
**Effect of Temperature on Capacity**



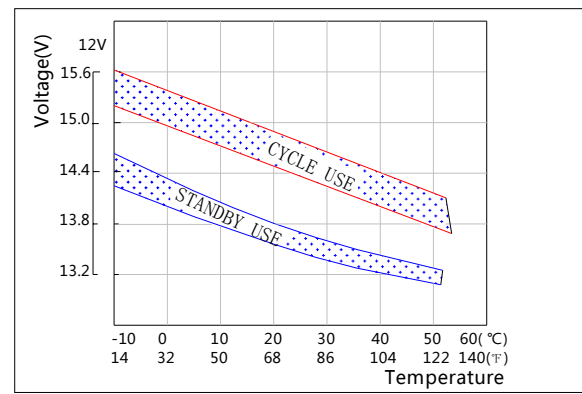
**Self-discharge Characteristics**



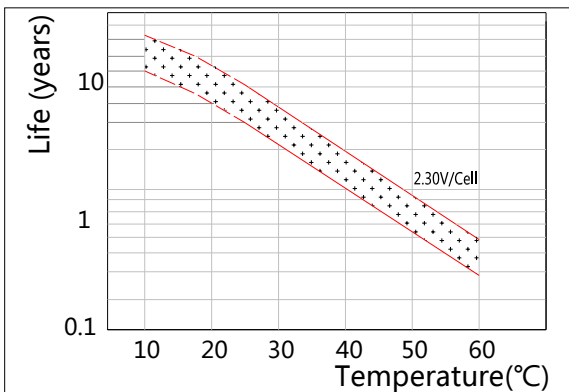
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**

