

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	24 Ah
	10HR(10.5V)	22.3Ah
	1HR(9.60V)	15.1Ah
Dimension	Length	166 ± 2mm (6.54inch)
	Width	175 ± 2mm (6.89inch)
	Height	125 ± 2mm (4.92inch)
	Total Height	125 ± 2mm (4.92inch)
Approx. Weight		7.8kg (17.2lbs) ± 4%
Terminal type		T3/T8
Internal resistance (Fully charged, 25°C)		Approx. 14mΩ
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		7.2A
Terminal material		Copper
Maximum discharge current		360A(5 sec.)
Designed floating life(20°C)		3~5 years

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

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

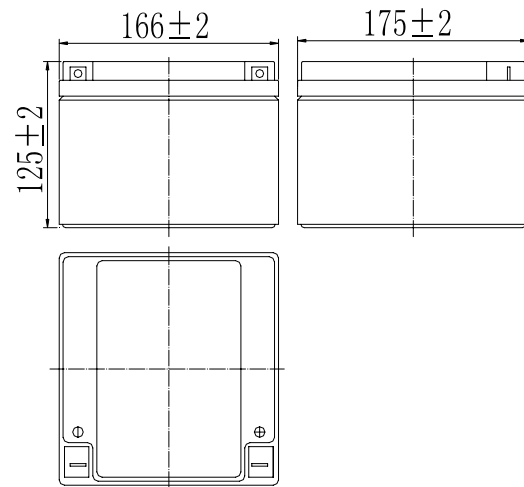
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	56.3	44.1	24.6	15.1	8.53	6.12	4.90	4.16	2.69	2.27	1.22
9.90V	54.6	43.1	24.1	14.9	8.48	6.08	4.87	4.14	2.68	2.26	1.21
10.2V	52.4	41.5	23.4	14.5	8.40	6.04	4.83	4.11	2.66	2.25	1.21
10.5V	50.1	40.1	22.8	14.2	8.27	6.00	4.80	4.08	2.64	2.23	1.20
10.8V	47.3	38.0	22.0	13.8	8.06	5.82	4.66	3.96	2.56	2.19	1.18

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

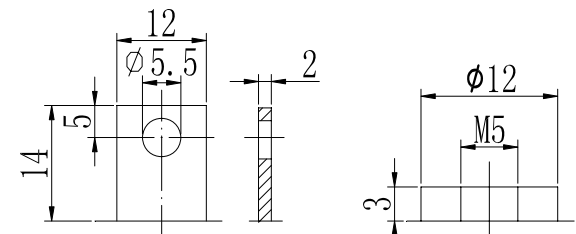
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	635	503	282	175	99.8	72.7	58.3	49.7	32.3	27.2	14.6
9.90V	616	491	277	172	99.2	72.3	58.0	49.4	32.1	27.1	14.6
10.2V	591	473	268	168	98.3	71.8	57.6	49.1	31.9	26.9	14.5
10.5V	565	457	262	165	96.8	71.3	57.2	48.7	31.7	26.8	14.4
10.8V	533	433	252	159	94.3	69.1	55.5	47.3	30.7	26.2	14.1

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

**Dimensions**



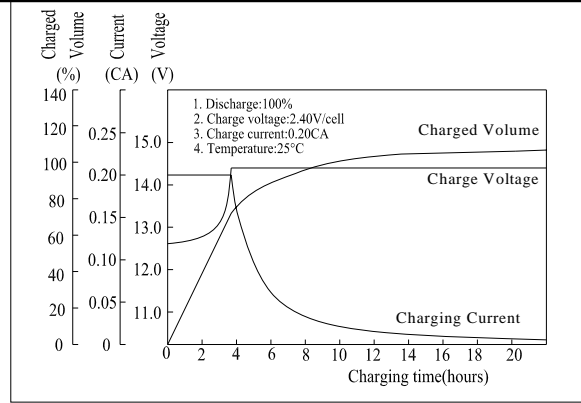
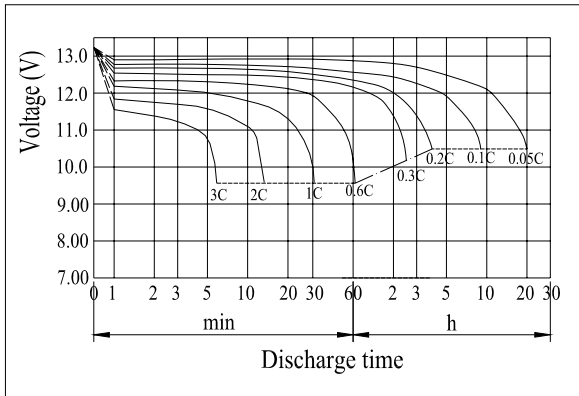
**Terminal**



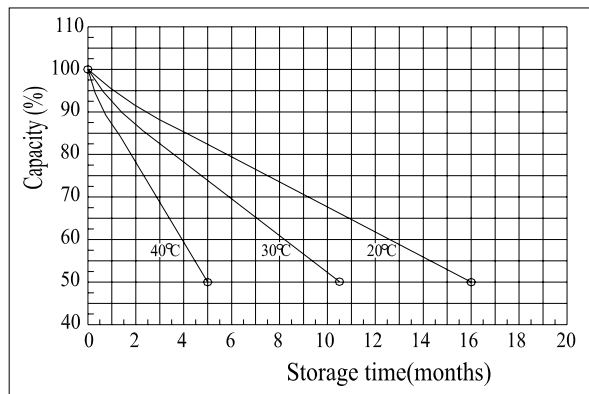
Terminal T3

Terminal T8

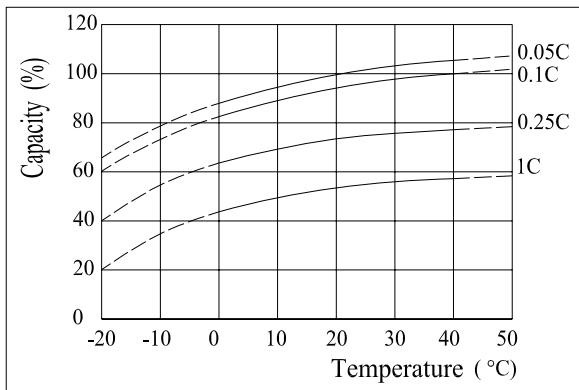
**Discharge Characteristics(25°C)**



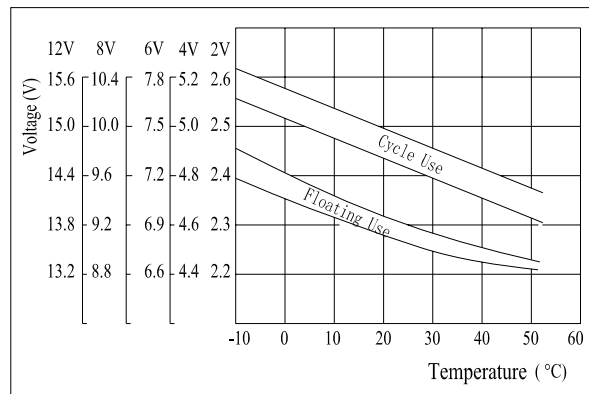
**Self-discharge Characteristics**



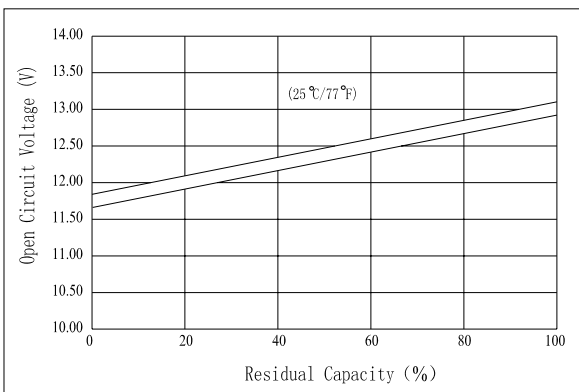
**Effect of Temperature on Capacity**



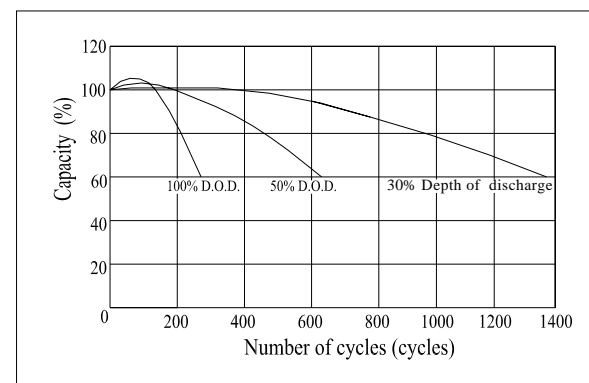
**The Relationship for Charging Voltage and Temperature**



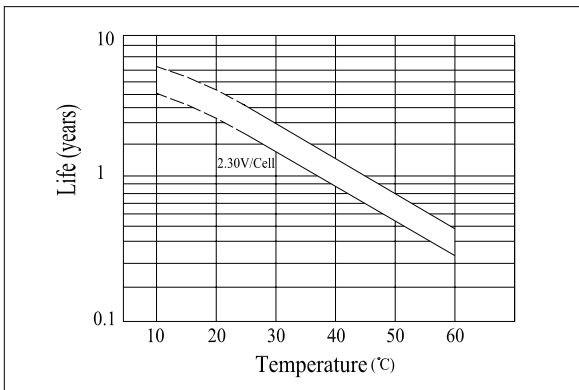
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**Cycle Life on D.O.D(25°C)**



**Floating Life on Temperature**



**Charging Characteristics(25°C)**