

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	24 Ah
	10HR(10.5V)	22.3Ah
	1HR(9.60V)	15Ah
Dimension	Length	166 ± 2mm (6.54inch)
	Width	175 ± 2mm (6.89inch)
	Height	125 ± 2mm (4.92inch)
	Total Height	125 ± 2mm (4.92inch)
Approx. Weight		7.9kg (17.4lbs) ± 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 ~ 70°C (5°F ~ 158°F)
	Charge	-10°C ~ 70°C (14°F ~ 158°F)
	Storage	-20°C ~ 70°C (-4°F ~ 158°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)		5~7 years

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

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

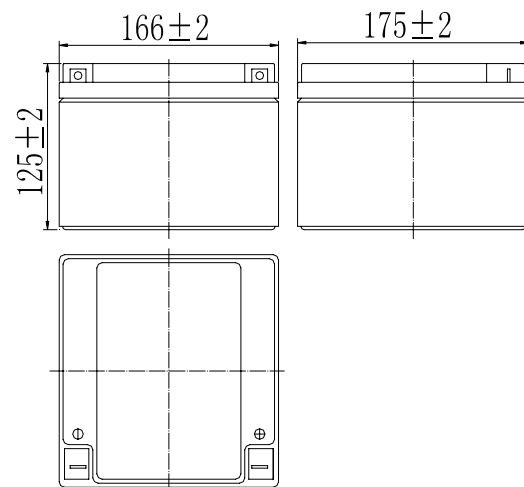
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	54.7	43.8	24.4	15.0	8.53	6.12	4.90	4.16	2.69	2.27	1.22
9.90V	53.1	42.7	23.9	14.7	8.48	6.08	4.87	4.14	2.68	2.26	1.21
10.2V	50.9	41.1	23.2	14.4	8.40	6.04	4.83	4.11	2.66	2.25	1.21
10.5V	48.7	39.7	22.6	14.1	8.27	6.00	4.80	4.08	2.64	2.23	1.20
10.8V	46.0	37.6	21.8	13.6	8.06	5.82	4.66	3.96	2.56	2.19	1.18

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

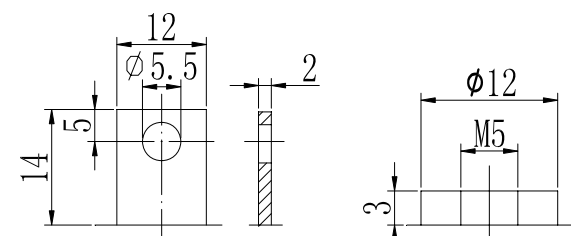
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	617	499	280	173	99.8	72.7	58.3	49.7	32.3	27.2	14.6
9.90V	599	487	274	171	99.2	72.3	58.0	49.4	32.1	27.1	14.6
10.2V	574	469	266	166	98.3	71.8	57.6	49.1	31.9	26.9	14.5
10.5V	549	453	259	163	96.8	71.3	57.2	48.7	31.7	26.8	14.4
10.8V	518	429	250	158	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**



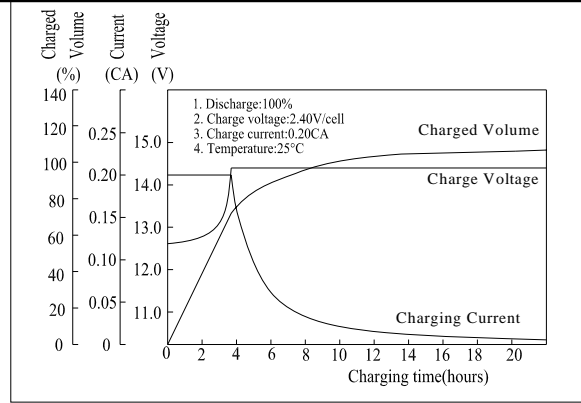
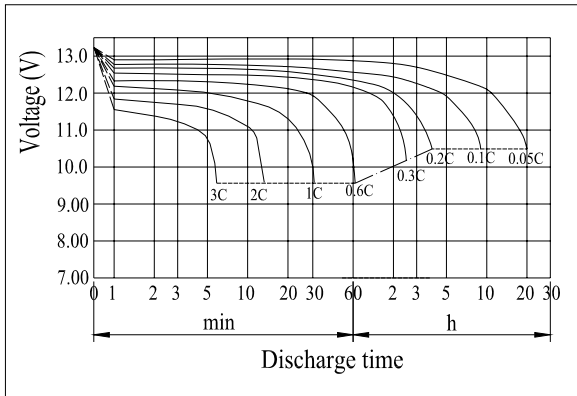
**Terminal**



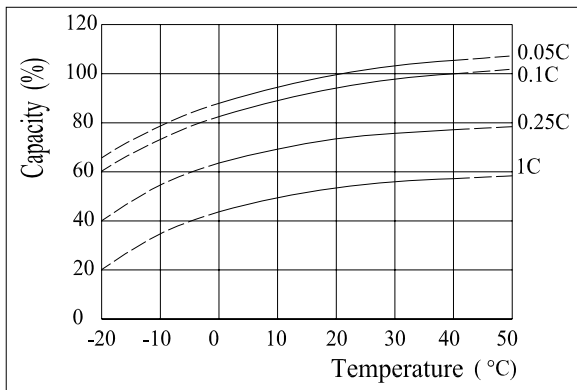
Terminal T3

Terminal T8

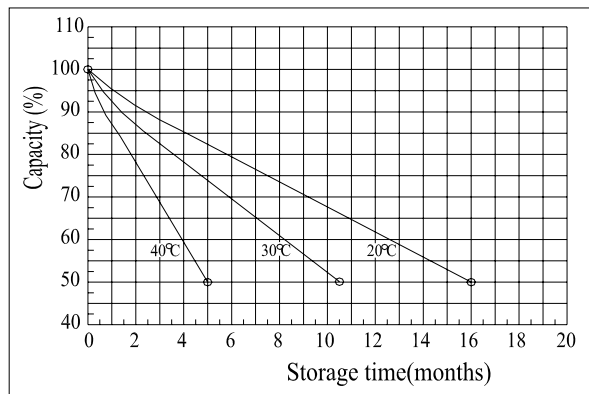
**Discharge Characteristics(25°C)**



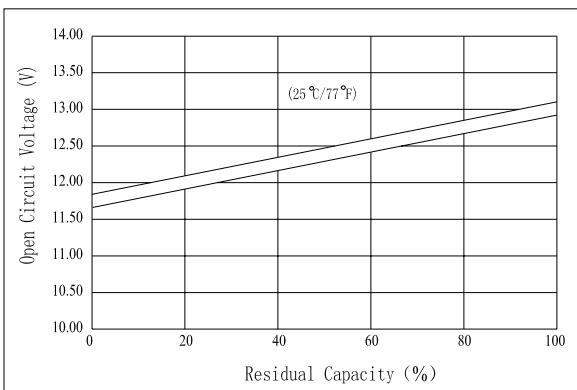
**Effect of Temperature on Capacity**



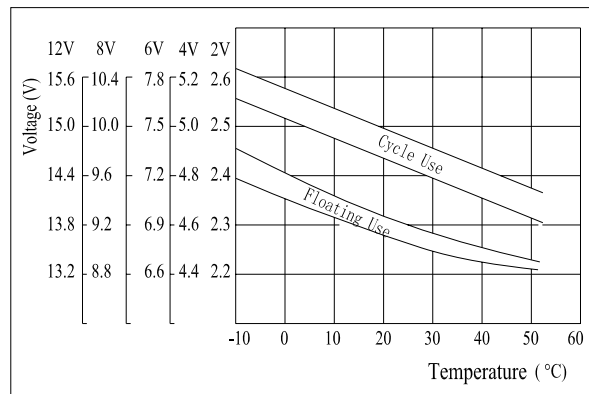
**Self-discharge Characteristics**



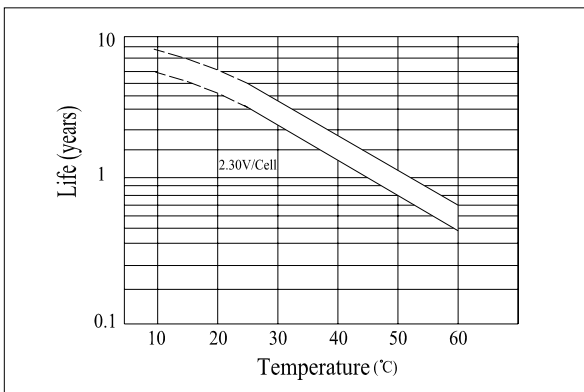
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



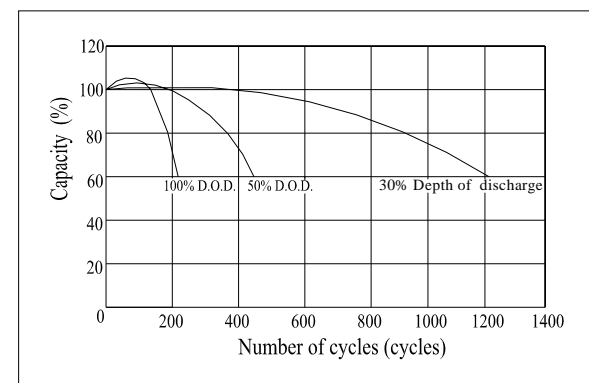
**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**



**Charging Characteristics(25°C)**