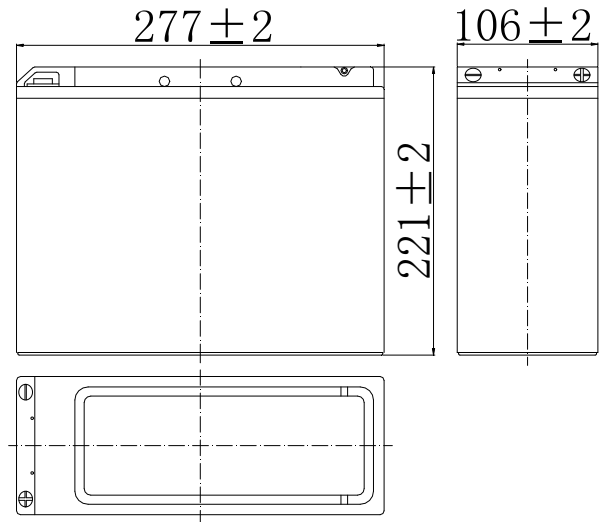
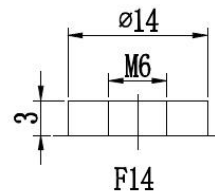


**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	50 Ah
	5HR(10.5V)	44Ah
	1HR(9.60V)	30Ah
Dimension	Length	277 ± 2mm (10.91inch)
	Width	106 ± 2mm (4.17inch)
	Height	221 ± 2mm (8.70inch)
	Total Height	221 ± 2mm (8.70inch)
Approx. Weight		15.5kg (34.2lbs) ± 4%
Terminal type		F14
Internal resistance (Fully charged, 25°C)		Approx. 7.5m Ω
Capacity affected by temperature (10HR)	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)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		15A
Maximum discharge current		500A(5 sec.)
Designed floating life(20°C)		12 years


**Dimensions**

**Terminal**

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

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	106	81.5	48.7	30.0	18.3	13.0	10.5	8.98	6.17	5.09	2.70
9.90V	103	79.5	47.8	29.5	18.2	12.9	10.4	8.92	6.13	5.08	2.69
10.2V	98.3	76.6	46.3	28.8	18.0	12.8	10.4	8.86	6.09	5.07	2.68
10.5V	94.1	74.0	45.2	28.2	17.7	12.8	10.3	8.80	6.05	5.04	2.67
10.8V	88.8	70.1	43.5	27.3	17.3	12.4	9.99	8.54	5.87	5.00	2.65

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

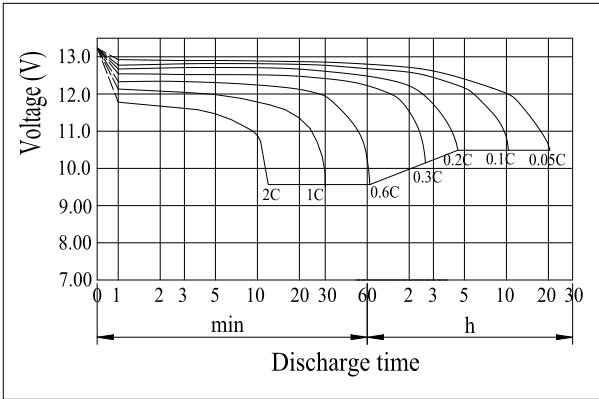
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1142	895	547	342	212	153	124	106	73.3	60.8	32.4
9.90V	1108	873	536	337	210	152	123	105	72.9	60.7	32.3
10.2V	1062	841	520	328	208	151	122	105	72.4	60.5	32.2
10.5V	1016	812	507	321	205	150	121	104	71.9	60.1	32.0
10.8V	959	769	488	311	200	145	117	101	69.7	59.7	31.8

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

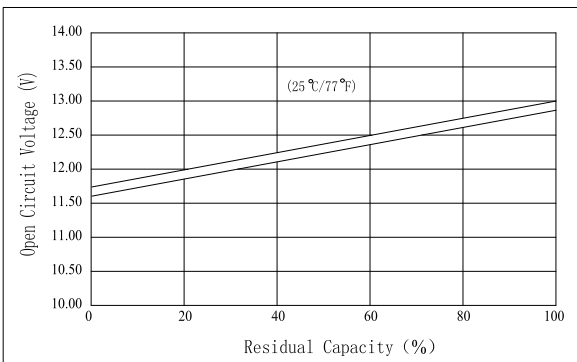
**Construction**

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

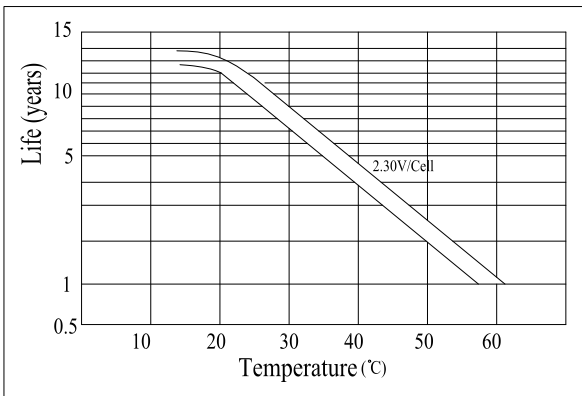
**Discharge Characteristics(25°C)**



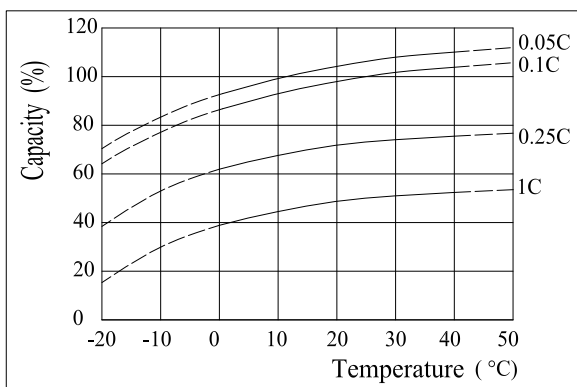
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



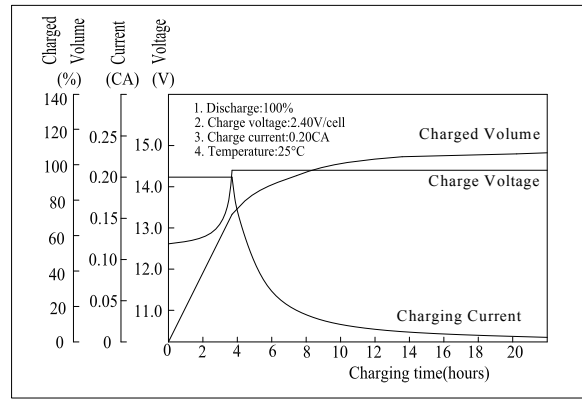
**Floating Life on Temperature**



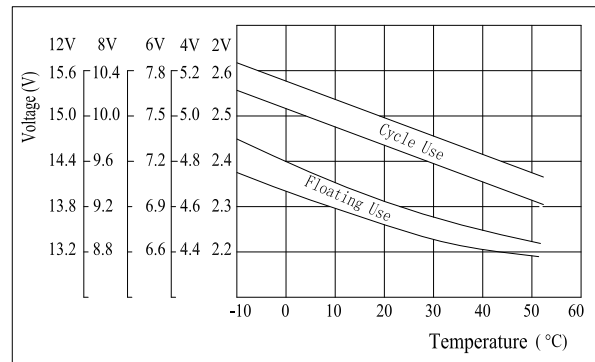
**Effect of Temperature on Capacity**



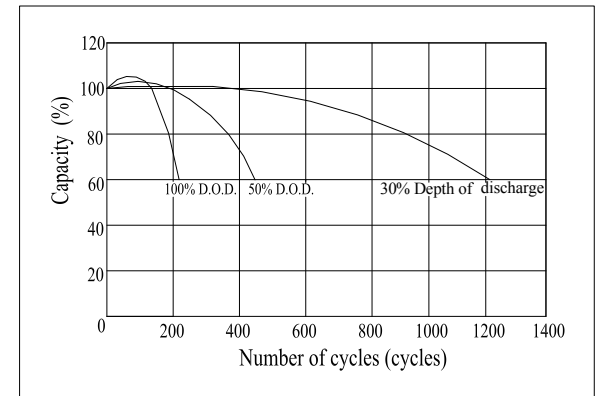
**Charging Characteristics(25°C)**



**The Relationship for Charging Voltage and Temperature**



**Cycle Life on D.O.D(25°C)**



**Self-discharge Characteristics**

