



### ● Specifications

Nominal Voltage		12V
Rated Capacity (20 hour rate)		12Ah
Dimensions	Total Height	101±2mm(3.98 inches)
	Height	95±2mm(3.74 inches)
	Length	151±2mm(5.94 inches)
	Width	98 mm(3.86 inches)
Weight Approx		3.25kg(7.16lbs)± 4%

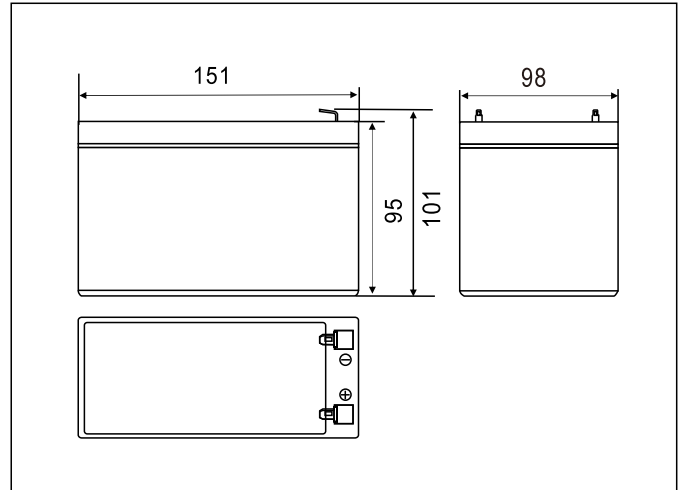
### ● Characteristics

Capacity 25°C(77°F)	20 hour rate(0.60A)	12.0 AH
	10 hour rate(1.12A)	11.2 AH
	5 hour rate(2.08A)	10.4AH
	1 hour rate(7.78 A)	7.78 AH
Internal Resistance	Full charged Battery at 25°C(77°F)	19m Ω
Capacity affected by Temperature (20hour rate)	40°C(104°F)	102%
	25°C(77°F)	100%
	0°C(32°F)	85%
	-15°C(5°F)	65%
Self-Discharge at 25°C(77°F)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
	Capacity after 12 month storage	64%
Charge (constant voltage)	Cycle	Initial Charging Current Less than 3.6A Voltage 14.50-14.90V
	Float	Voltage 13.50-13.80V

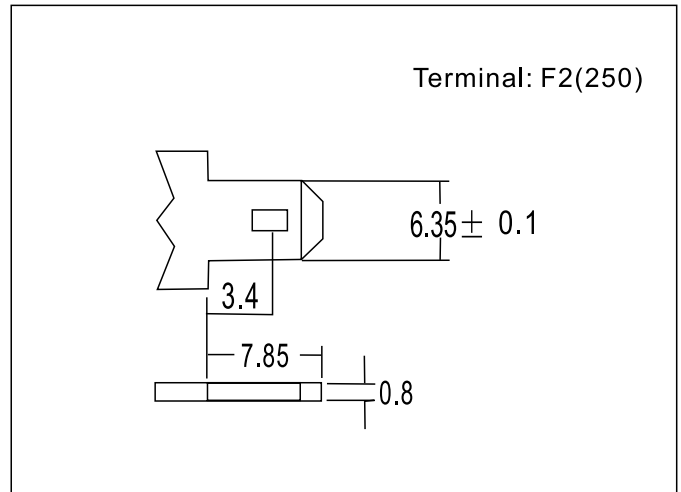
### ● Applications

- Electric tools
- Electric toys
- Emergency lighting
- Electronic instruments
- Medical equipment
- Alarm and security systems
- Solar power systems
- Wind power systems
- Telecommunication equipments
- Uninterruptible power supplies

### ● Outer Dimensions (mm)



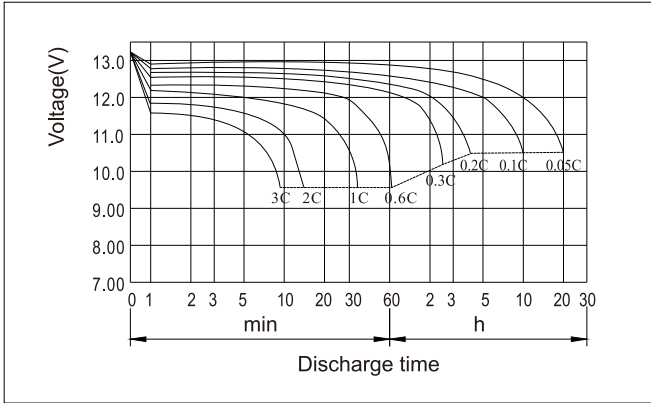
### ● Terminal Type (mm)



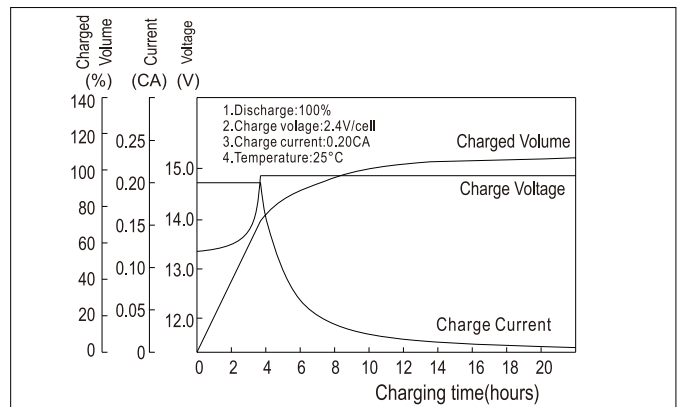
### Constant Current(AMP) and Constant Power(Watt) Characteristics at 25°C(77°F)

F.V/TIME	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	28.7	22.5	12.6	7.78	4.23	3.06	2.44	2.08	1.33	0.60
	w	328	265	148	90.3	49.5	36.6	29.0	24.9	16.4	7.29
9.90V	A	27.9	22.1	12.5	7.67	4.21	3.05	2.43	2.08	1.33	0.60
	w	318	260	142	89.0	49.2	36.4	29.0	24.8	16.3	7.27
10.2V	A	26.8	21.1	12.3	7.42	4.18	3.03	2.42	2.07	1.32	0.59
	w	308	250	138	86.5	48.6	35.9	28.7	24.7	16.2	7.24
10.5V	A	25.9	20.3	12.0	7.32	4.11	3.06	2.40	2.06	1.31	0.59
	w	296	241	134	85.0	48.1	35.6	28.5	24.6	15.9	7.20
10.8V	A	24.2	19.2	11.6	7.10	3.99	2.98	2.33	1.99	1.26	0.58
	w	278	227	129	82.2	46.9	34.5	27.7	23.9	15.5	7.04

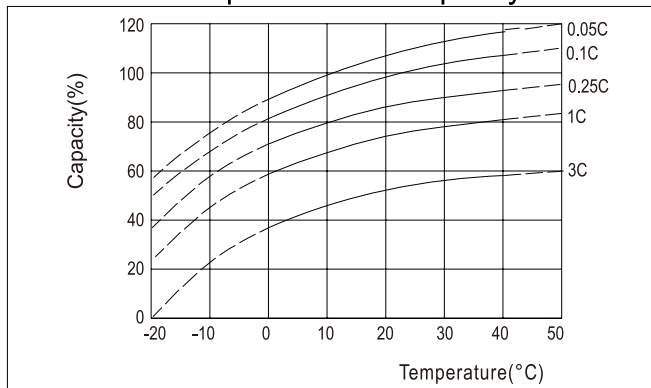
### ● Discharge Characteristics(25°C)



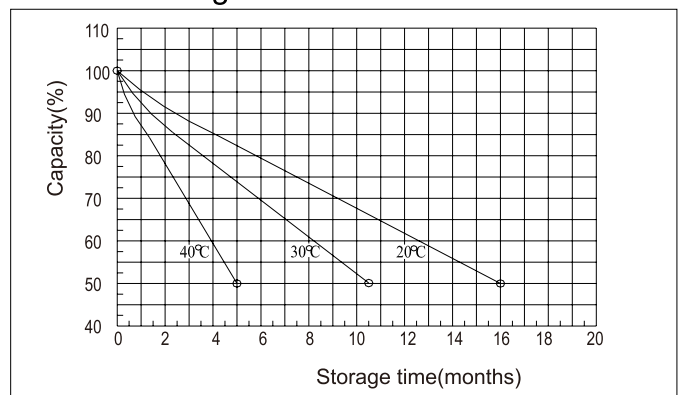
### ● Charging Characteristics(25°C)



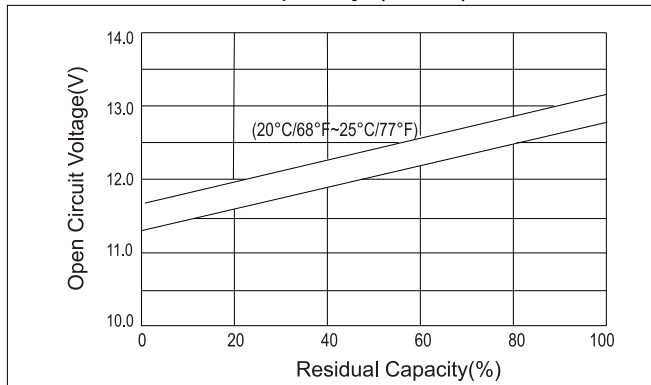
### ● Effect of Temperature on Capacity



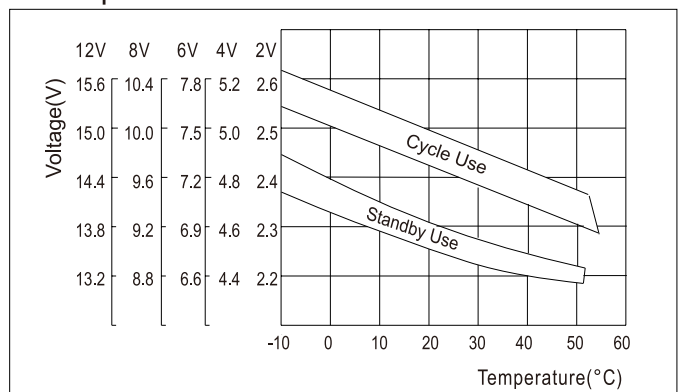
### ● Self-discharge Characteristics



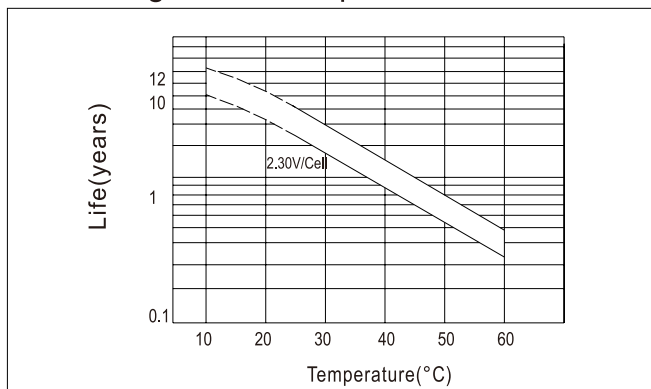
### ● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



### ● The Relationship for Charging Voltage and Temperature



### ● Floating Life on Temperature



### ● Cycle Life on D.O.D (25°C)

