



Specifications

Nominal Voltage		12V
Rated Capacity (20 hour rate)		4Ah
Dimensions	Total Height	107±2mm(4.21 inches)
	Height	101±2mm(3.98 inches)
	Length	90±2mm(3.54 inches)
	Width	70±2mm(2.76 inches)
Weight Approx		1.33kg(2.94 lbs)± 4%

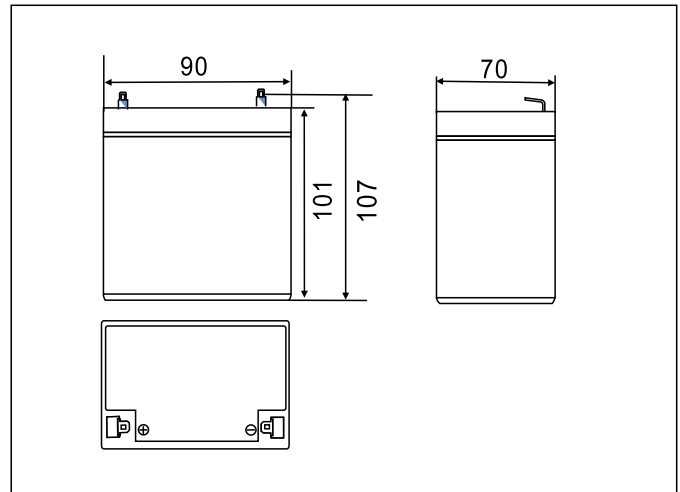
Characteristics

Capacity 25°C(77°F)	20 hour rate(0.20A)	4.00 AH
	10 hour rate(0.38A)	3.80 AH
	5 hour rate(0.69A)	3.45AH
	1 hour rate(2.60A)	2.60 AH
Internal Resistance	Full charged Battery at 25°C(77°F)	55mΩ
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 1.2 A Voltage 14.50-14.90V
	Float	Voltage 13.50-13.80V

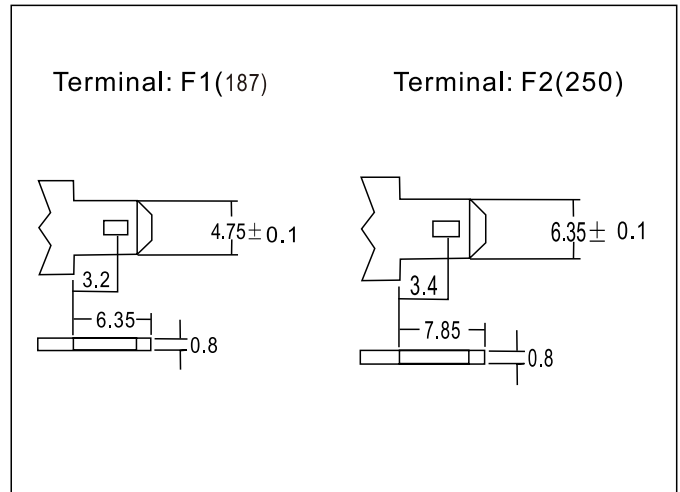
Applications

- 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)



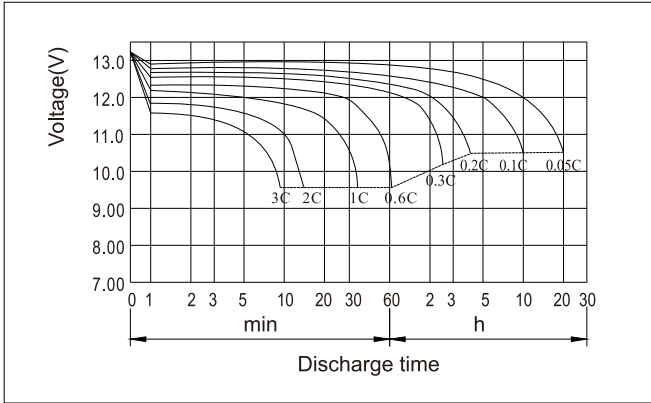
Terminal Type (mm)



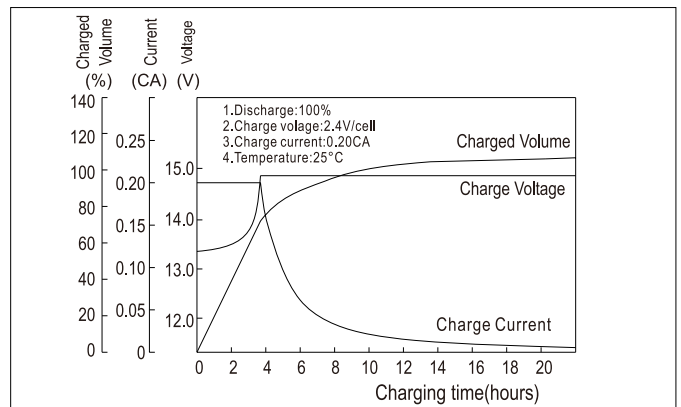
Constant Current(AMP) and Constant Power(Watt) Characteristics at 25°C(77°F)

F.V/TIME	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h	
9.60V	A	15.2	9.60	5.70	4.24	2.60	1.42	1.02	0.82	0.69	0.38	0.20
	w	170	108	60.5	48.6	30.1	16.6	12.1	9.72	8.28	4.53	2.44
9.90V	A	14.7	9.31	5.12	4.16	2.56	1.41	1.01	0.81	0.69	0.38	0.20
	w	165	105	56.9	47.6	29.7	16.5	12.0	9.66	8.23	4.51	2.43
10.2V	A	14.1	8.93	4.80	4.03	2.50	1.40	1.01	0.81	0.68	0.37	0.20
	w	158	101	54.4	46.2	28.9	16.4	12.0	9.59	8.18	4.49	2.41
10.5V	A	13.5	8.54	4.50	3.93	2.45	1.38	1.00	0.80	0.68	0.37	0.20
	w	151	96.4	52.4	45.0	28.3	16.1	11.9	9.53	8.12	4.46	2.40
10.8V	A	12.8	8.06	4.20	3.79	2.37	1.34	0.97	0.78	0.66	0.36	0.20
	w	142	91.0	49.9	43.4	27.5	15.7	11.5	9.24	7.88	4.37	2.35

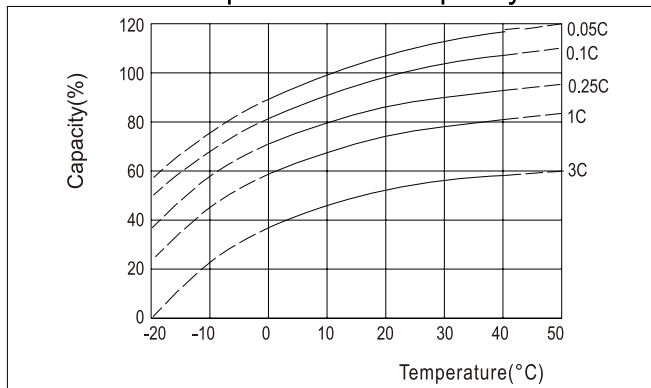
● Discharge Characteristics(25°C)



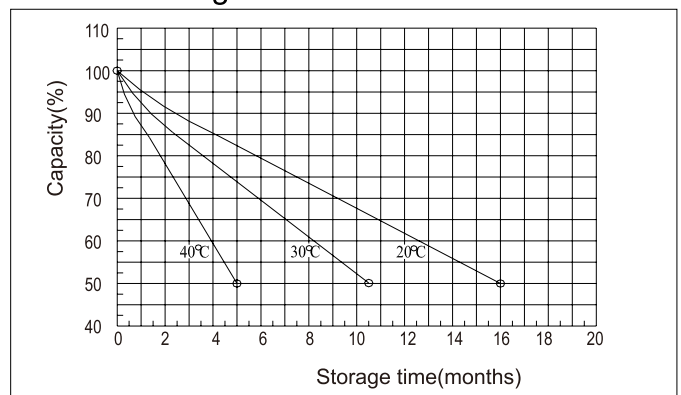
● Charging Characteristics(25°C)



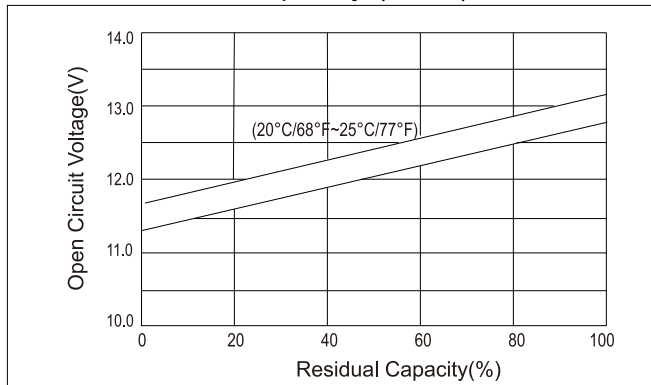
● Effect of Temperature on Capacity



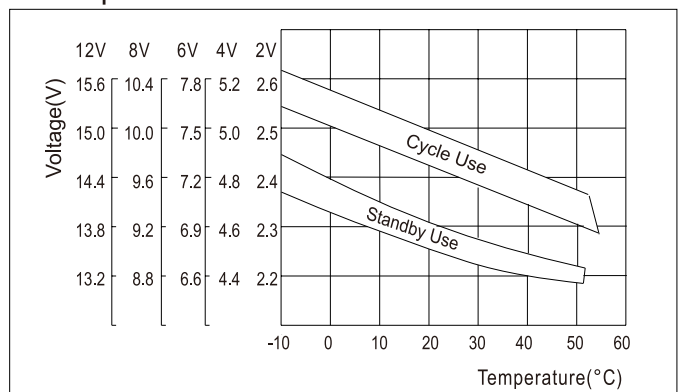
● Self-discharge Characteristics



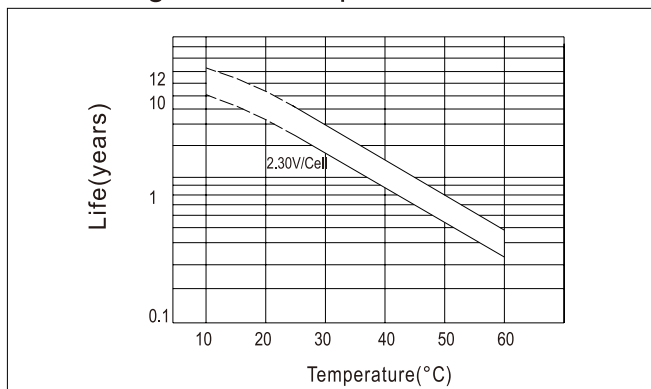
● The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



● The Relationship for Charging Voltage and Temperature



● Floating Life on Temperature



● Cycle Life on D.O.D (25°C)

