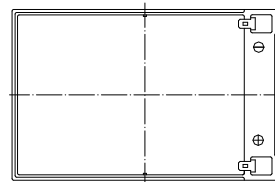
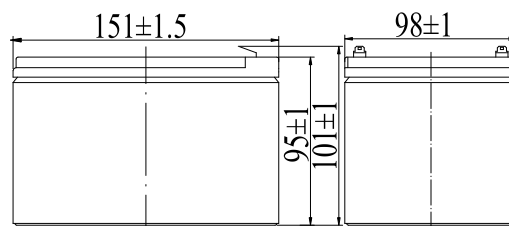


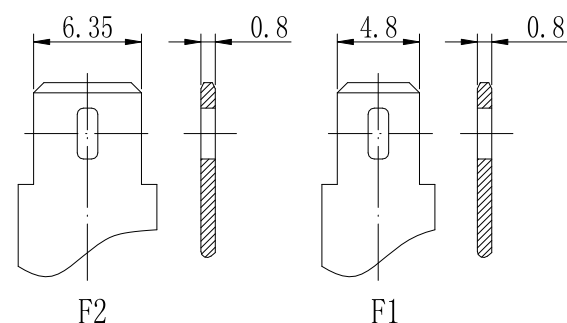
Specifications

Nominal Voltage		12 V
Capacity (25℃)	20HR(10.5V)	14Ah
	10HR(10.5V)	13Ah
	1HR(9.60V)	9.1Ah
Dimension	Length	151±1.5mm (5.94inch)
	Width	98±1mm (3.86inch)
	Height	95±1mm (3.74inch)
	Total Height	101±1mm (3.98inch)
Approx. Weight		3.9kg (8.60lbs)±5%
Terminal type		F2/F1
Internal resistance (Fully charged, 25℃)		Approx. 12mΩ
Capacity affected by temperature (20HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25℃±3℃(77°F±5°F)
Operating temperature range	Discharge	-15℃~50℃(5°F~122°F)
	Charge	-10℃~50℃(14°F~122°F)
	Storage	-20℃~50℃(-4°F~122°F)
Float charging voltage(25℃)		13.60 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 15.00V Temperature compensation: -30mV/℃
Maximum charging current		4.2A
Maximum discharge current		210A(5 sec.)
Designed floating life(20℃)		5 years

Dimensions



Terminal



Constant Current Discharge Characteristics (A, 25℃)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	53.5	33.9	26.5	14.9	9.17	5.02	3.47	2.87	2.44	1.33	0.71
9.90V	51.9	32.9	25.8	14.6	9.03	4.99	3.45	2.85	2.43	1.32	0.71
10.2V	49.7	31.5	24.9	14.2	8.80	4.94	3.43	2.83	2.41	1.31	0.70
10.5V	47.6	30.2	24.0	13.8	8.63	4.87	3.40	2.81	2.39	1.31	0.70
10.8V	44.9	28.5	22.8	13.3	8.36	4.74	3.30	2.73	2.32	1.28	0.69

Constant Power Discharge Characteristics (Watt, 25℃)

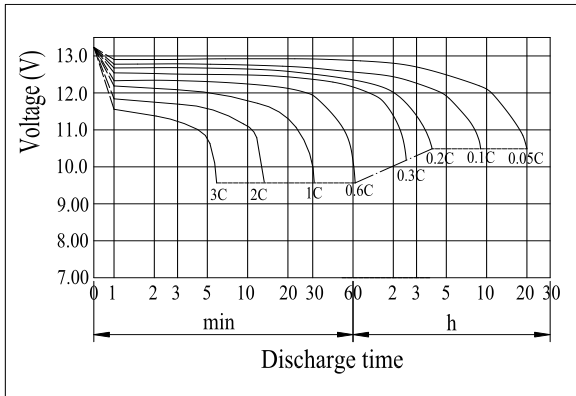
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	597	382	302	171	106	58.7	41.2	34.2	29.2	15.9	8.53
9.90V	579	371	294	167	105	58.3	41.0	34.0	29.0	15.8	8.49
10.2V	555	355	284	162	102	57.8	40.7	33.7	28.8	15.8	8.45
10.5V	531	340	274	158	99.9	57.0	40.4	33.5	28.6	15.7	8.40
10.8V	501	321	259	153	96.8	55.5	39.2	32.5	27.7	15.4	8.23

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

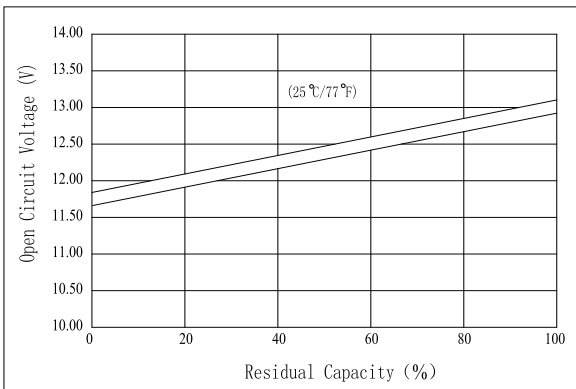
Construction

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

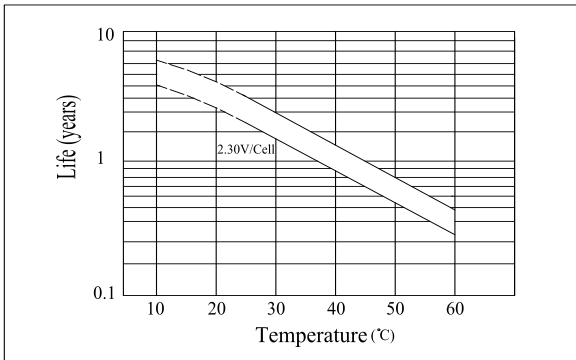
Discharge Characteristics(25°C)



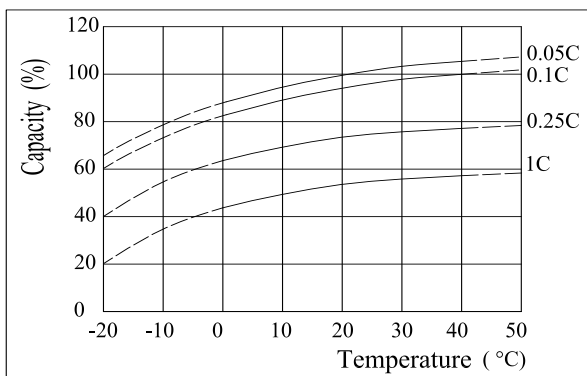
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



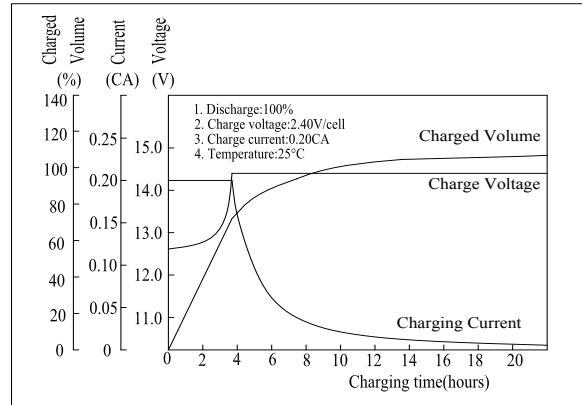
Floating Life on Temperature



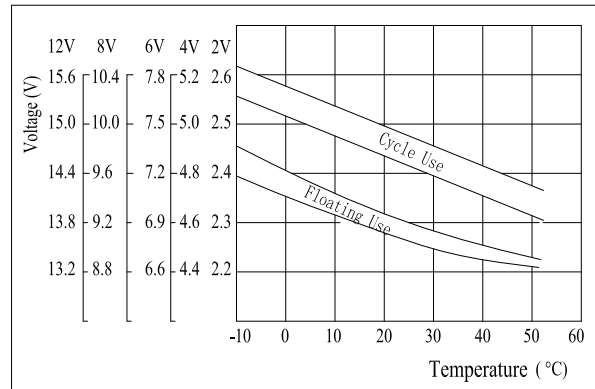
Effect of Temperature on Capacity



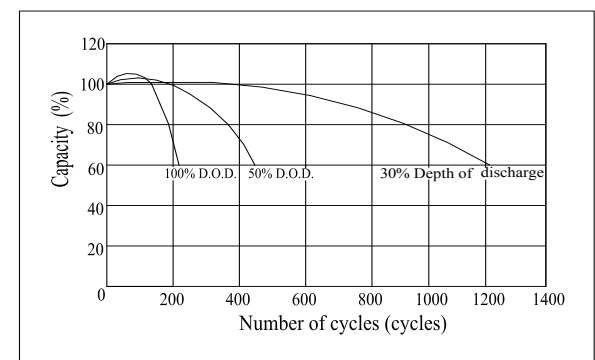
Charging Characteristics(25°C)



The Relationship for Charging Voltage and Temperature



Cycle Life on D.O.D(25°C)



Self-discharge Characteristics

