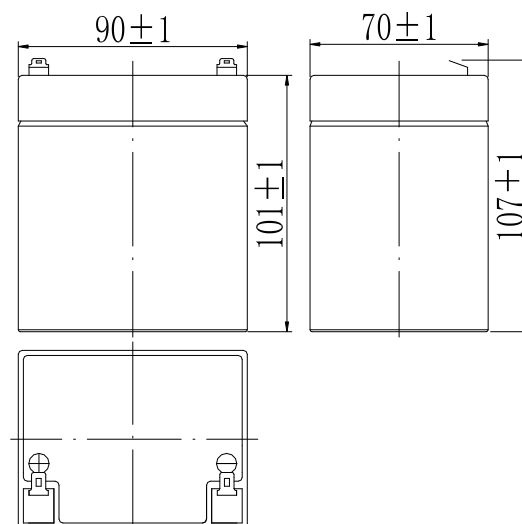


Specifications

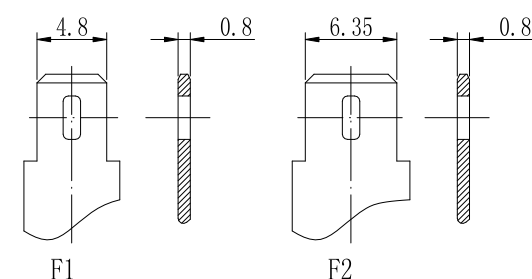
Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	5Ah
	10HR(10.5V)	4.7Ah
	1HR(9.60V)	3.2Ah
Dimension	Length	90±1mm (3.54inch)
	Width	70±1mm (2.76inch)
	Height	101±1mm (3.98inch)
	Total Height	107±1mm (4.21inch)
Approx. Weight		1.6kg (3.53lbs)±5%
Terminal type		F1/F2
Internal resistance (Fully charged, 25°C)		Approx. 26mΩ
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~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)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		1.5A
Maximum discharge current		75A(5 sec.)
Designed floating life(20°C)		5 years



Dimensions



Terminal



Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	19.1	12.1	9.45	5.33	3.28	1.79	1.24	1.03	0.87	0.47	0.25
9.90V	18.5	11.7	9.22	5.22	3.23	1.78	1.23	1.02	0.87	0.47	0.25
10.2V	17.8	11.3	8.88	5.06	3.14	1.77	1.22	1.01	0.86	0.47	0.25
10.5V	17.0	10.8	8.58	4.94	3.08	1.74	1.22	1.01	0.86	0.47	0.25
10.8V	16.0	10.2	8.13	4.76	2.99	1.69	1.18	0.97	0.83	0.46	0.25

Constant Power Discharge Characteristics (Watt, 25°C)

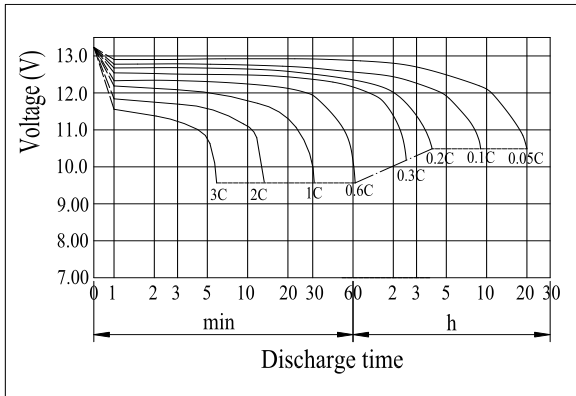
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	213	136	108	61.0	37.9	21.0	14.7	12.2	10.4	5.68	3.05
9.90V	207	132	105	59.8	37.4	20.8	14.6	12.1	10.4	5.66	3.03
10.2V	198	127	101	58.0	36.4	20.7	14.5	12.1	10.3	5.63	3.02
10.5V	190	121	97.8	56.6	35.7	20.3	14.4	12.0	10.2	5.60	3.00
10.8V	179	115	92.6	54.5	34.6	19.8	14.0	11.6	9.90	5.49	2.94

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

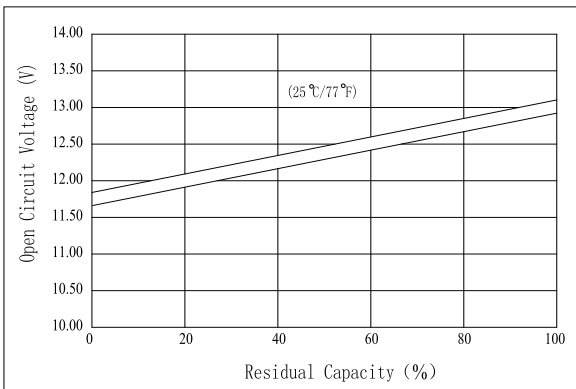
Construction

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

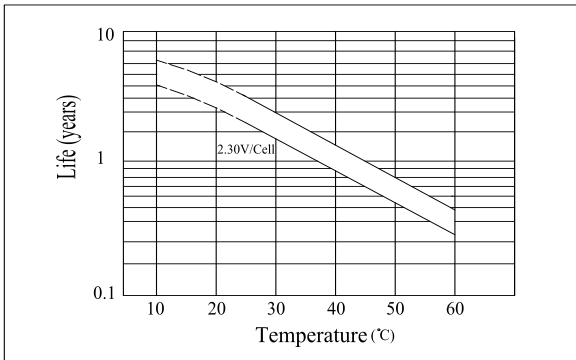
Discharge Characteristics(25°C)



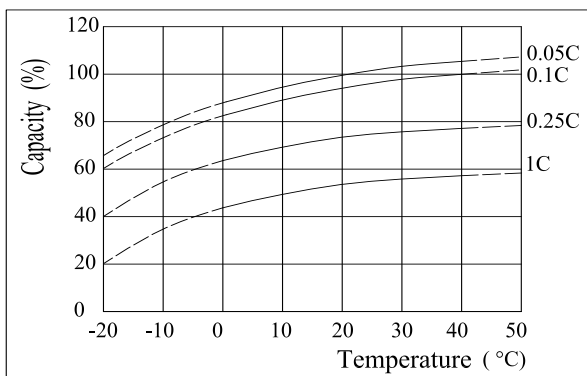
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



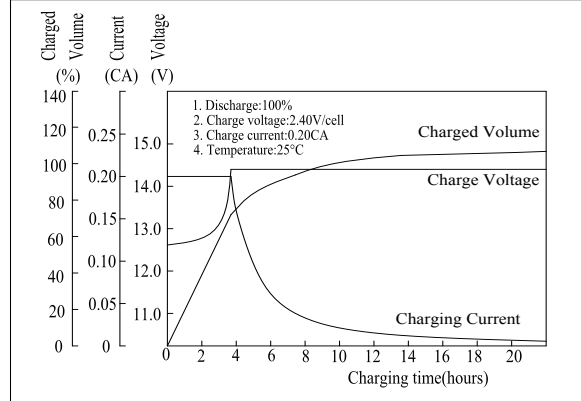
Floating Life on Temperature



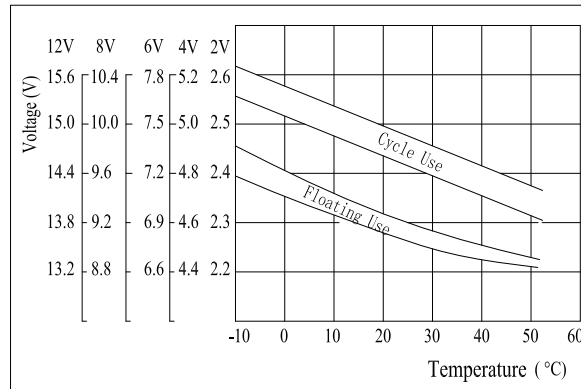
Effect of Temperature on Capacity



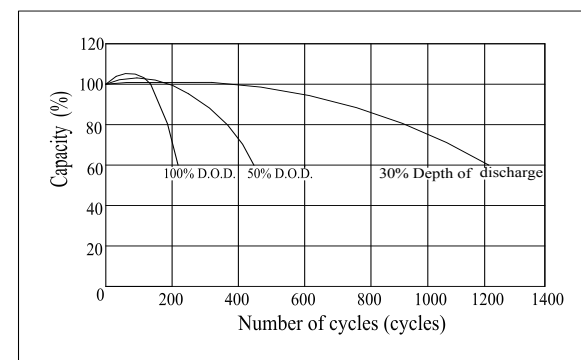
Charging Characteristics(25°C)



The Relationship for Charging Voltage and Temperature



Cycle Life on D.O.D(25°C)



Self-discharge Characteristics

