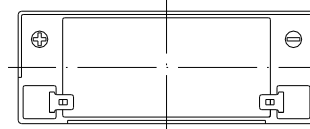
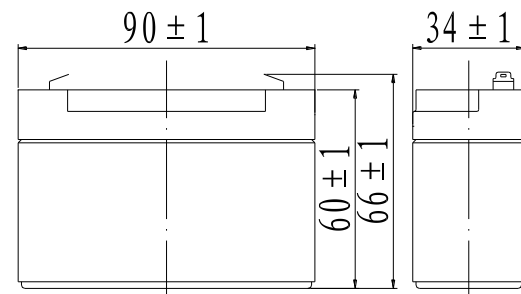
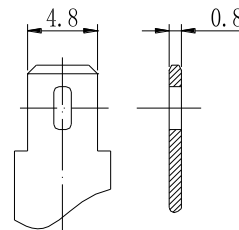


Specifications

Nominal Voltage		4 V
Capacity (25°C)	20HR(3.50V)	3.2Ah
	10HR(3.50V)	3.0Ah
	1HR(3.20V)	2.1Ah
Dimension	Length	90 ± 1mm (3.54inch)
	Width	34 ± 1mm (1.34inch)
	Height	60 ± 1mm (2.36inch)
	Total Height	66 ± 1mm (2.60inch)
Approx. Weight		0.45kg (0.99lbs) ± 5%
Terminal type		F1
Internal resistance (Fully charged, 25°C)		Approx. 18mΩ
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)		4.54 to 4.60V Temperature compensation: -6mV/°C
Cyclic charging voltage(25°C)		4.84 to 5.00V Temperature compensation: -10mV/°C
Maximum charging current		0.96A
Maximum discharge current		48A(5 sec.)
Designed floating life(20°C)		5 years

Dimensions

Terminal


F1

Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
3.20V	12.2	7.74	6.05	3.41	2.10	1.15	0.79	0.66	0.56	0.30	0.16
3.30V	11.9	7.51	5.90	3.34	2.06	1.14	0.79	0.65	0.55	0.30	0.16
3.40V	11.4	7.20	5.69	3.24	2.01	1.13	0.78	0.65	0.55	0.30	0.16
3.50V	10.9	6.89	5.49	3.16	1.97	1.11	0.78	0.64	0.55	0.30	0.16
3.60V	10.3	6.50	5.20	3.04	1.91	1.08	0.75	0.62	0.53	0.29	0.16

Constant Power Discharge Characteristics (Watt, 25°C)

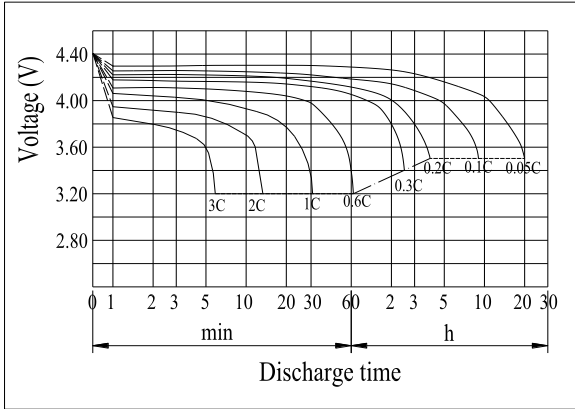
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
3.20V	45.5	29.1	23.0	13.0	8.09	4.47	3.14	2.60	2.22	1.21	0.65
3.30V	44.1	28.2	22.4	12.8	7.97	4.45	3.12	2.59	2.21	1.21	0.65
3.40V	42.3	27.1	21.6	12.4	7.77	4.41	3.10	2.57	2.19	1.20	0.64
3.50V	40.5	25.9	20.9	12.1	7.61	4.34	3.08	2.55	2.18	1.19	0.64
3.60V	38.2	24.5	19.8	11.6	7.38	4.23	2.99	2.48	2.11	1.17	0.63

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

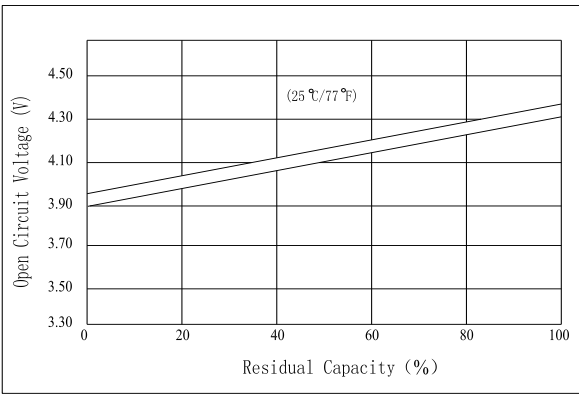
Construction

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

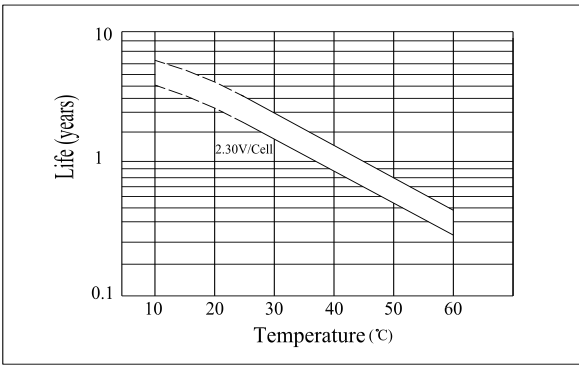
Discharge Characteristics(25°C)



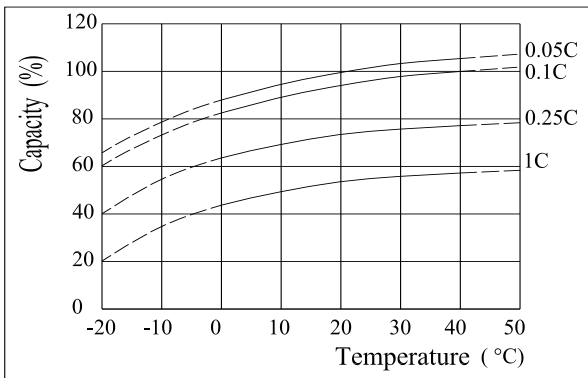
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



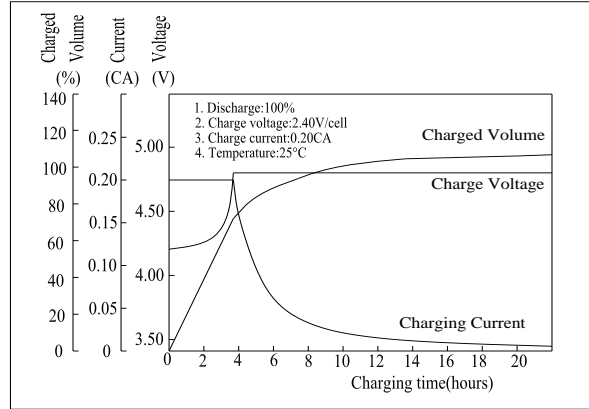
Floating Life on Temperature



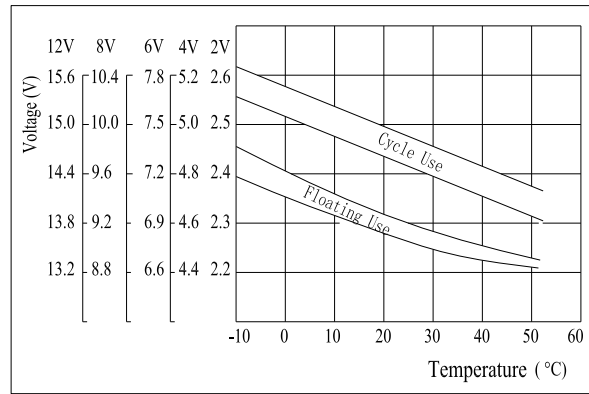
Effect of Temperature on Capacity



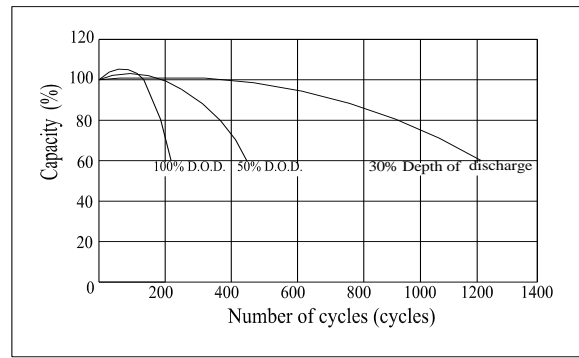
Charging Characteristics(25°C)



The Relationship for Charging Voltage and Temperature



Cycle Life on D.O.D(25°C)



Self-discharge Characteristics

