

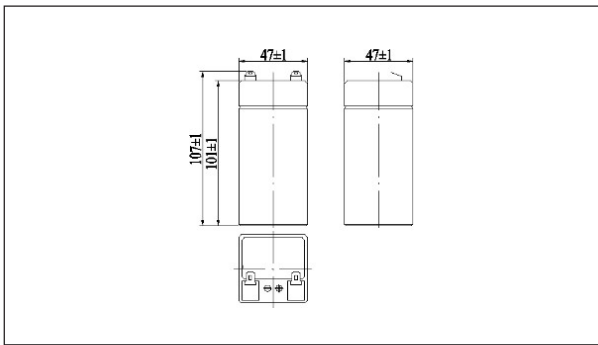
VP4-4 4V4Ah

● Specification

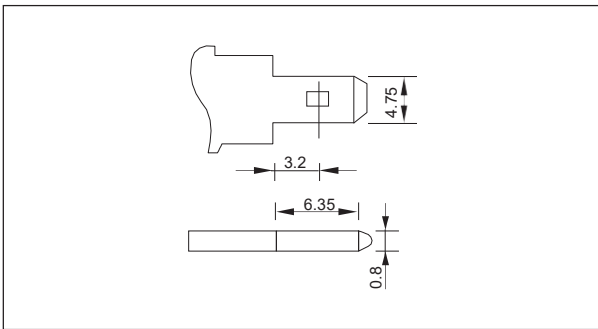
Nominal Voltage		4V
Rated capacity (20 hour rate)		4Ah
Dimensions	Length	47mm
	Width	47mm
	Height	101mm
	Total Height	107mm
Approx. Weight		0.46kg



● Outer dimension (mm)



● Terminal Type (mm)



● 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

● Constant Current Discharge Characteristic Unit:A(25°C)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
3.20V	15.3	9.68	7.56	4.26	2.62	1.43	0.99	0.82	0.70	0.38	0.20
3.30V	14.8	9.39	7.38	4.17	2.58	1.42	0.99	0.82	0.69	0.38	0.20
3.40V	14.2	9.00	7.11	4.05	2.52	1.41	0.98	0.81	0.69	0.38	0.20
3.50V	13.6	8.62	6.86	3.95	2.47	1.39	0.97	0.80	0.68	0.37	0.20
3.60V	12.8	8.13	6.50	3.80	2.39	1.36	0.94	0.78	0.66	0.37	0.20

● Constant Power Discharge Characteristic Unit:W(25°C)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
3.20V	56.8	36.4	28.7	16.3	10.1	5.59	3.93	3.26	2.78	1.52	0.81
3.30V	55.1	35.3	28.0	15.9	10.0	5.56	3.90	3.24	2.76	1.51	0.81
3.40V	52.9	33.8	27.0	15.5	9.71	5.51	3.88	3.21	2.74	1.50	0.80
3.50V	50.6	32.4	26.1	15.1	9.52	5.42	3.85	3.19	2.72	1.49	0.80
3.60V	47.7	30.6	24.7	14.5	9.22	5.29	3.73	3.10	2.64	1.46	0.78

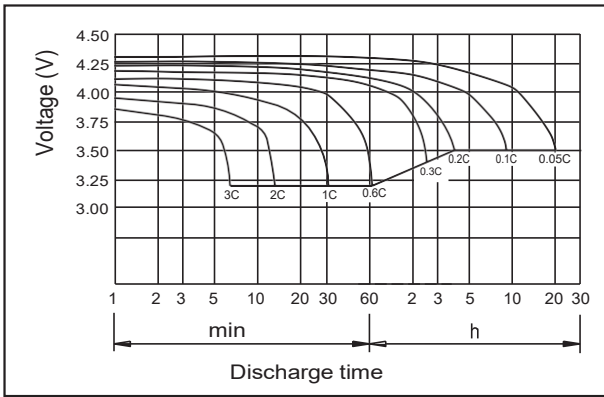
Note: The above characteristics data can be obtained within three charge or discharge cycles.

● Characteristic

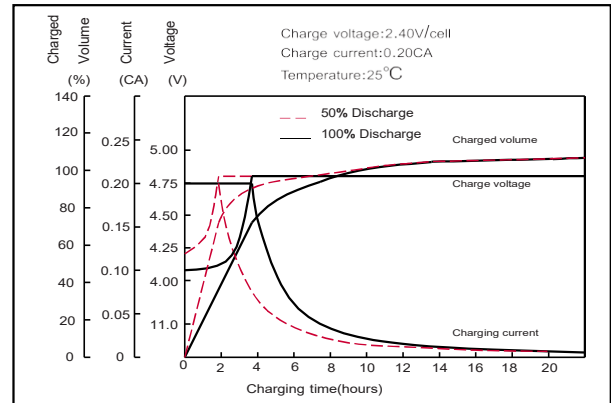
Capacity (25°C)	20HR(3.50V)	4Ah
	10HR(3.50V)	3.7Ah
	1HR(3.20V)	2.4Ah
Terminal type		T1 (L)
Internal resistance (Fully charged,25°C)		Approx.21m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3month	Remaining Capacity:91%
	6month	Remaining Capacity:82%
	12month	Remaining Capacity:65%
Nominal operating temperature		25°C
Operating temperature range	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Float charging voltage(25°C)		4.50 to 4.60V Temperature compensation: -6mV/°C
Cyclic charging voltage(25°C)		4.80 to 5.00V Temperature compensation: -10mV/°C
Maximum charging current		1.2A
Maximum discharge current		60A(5 sec.)
Designed floating life(20°C)		5 years

VP4-4 4V4Ah

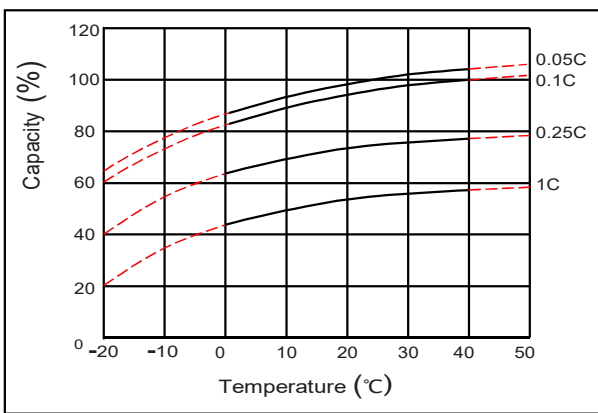
● Discharge characteristics(25°C)



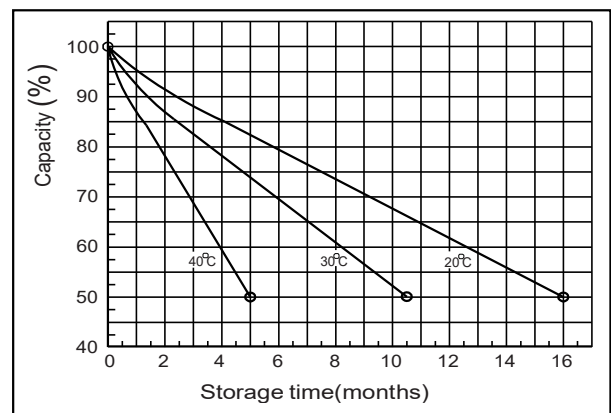
● Charging characteristics (25°C)



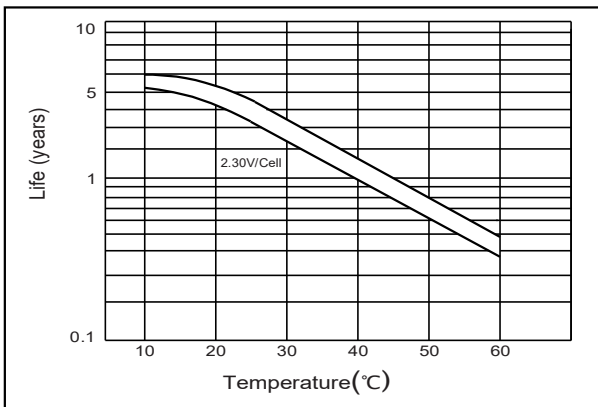
● Effect of temperature on capacity



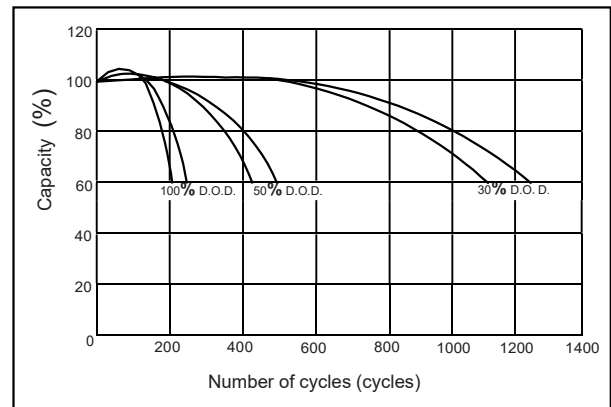
● Self-discharge characteristics



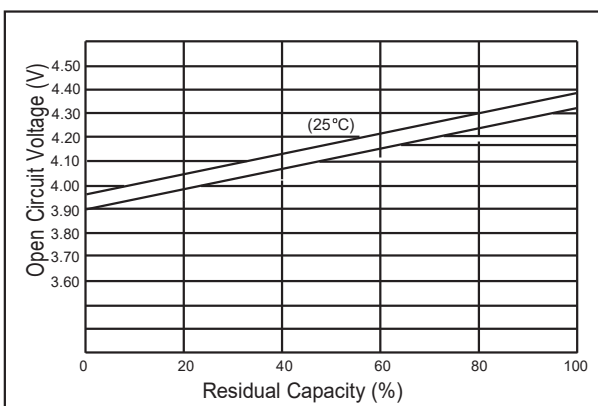
● Floating life on temperature



● Cycle life on D.O.D(25°C)



● The relationship for OCV and Capacity (25°C)



● The relationship for Charging voltage and Temperature

