

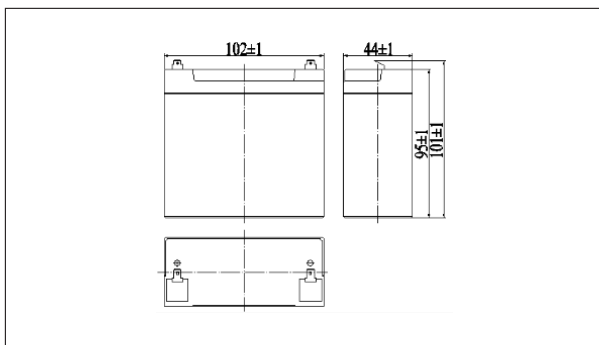
NP4-9Ah 4V9Ah



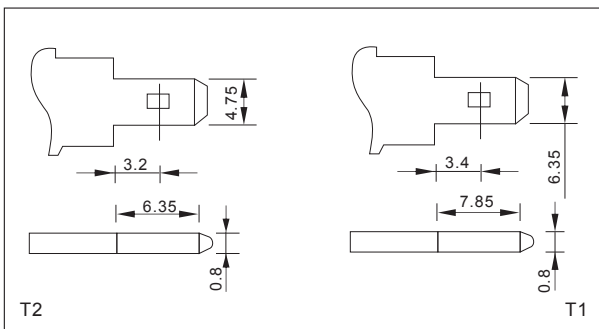
Specifications

Nominal Voltage		4V
Rated capacity (20 hour rate)		9Ah
Dimensions	Length	102±1mm(4.02inch)
	Width	44±1mm(1.73inch)
	Height	95±1mm(3.74inch)
	Total Height	101±1mm(3.98inch)
Approx. Weight		0.95kg(2.09lbs)±5%

Outer dimensions (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 Characteristics Unit:A(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
4.80V	34.4	21.8	17.0	9.59	5.90	3.22	2.23	1.85	1.57	0.85	0.46
4.95V	33.3	21.1	16.6	9.39	5.81	3.21	2.22	1.83	1.56	0.85	0.45
5.10V	32.0	20.3	16.0	9.11	5.66	3.18	2.20	1.82	1.55	0.84	0.45
5.25V	30.6	19.4	15.4	8.89	5.55	3.13	2.19	1.81	1.54	0.84	0.45
5.40V	28.9	18.3	14.6	8.56	5.38	3.05	2.12	1.75	1.49	0.82	0.44

Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
4.80V	128	81.9	64.6	36.6	22.8	12.6	8.83	7.33	6.25	3.41	1.83
4.95V	124	79.4	63.1	35.9	22.4	12.5	8.78	7.28	6.21	3.40	1.82
5.10V	119	76.2	60.8	34.8	21.8	12.4	8.72	7.23	6.17	3.38	1.81
5.25V	114	72.9	58.7	33.9	21.4	12.2	8.66	7.18	6.13	3.36	1.80
5.40V	107	68.8	55.6	32.7	20.8	11.9	8.40	6.97	5.94	3.29	1.76

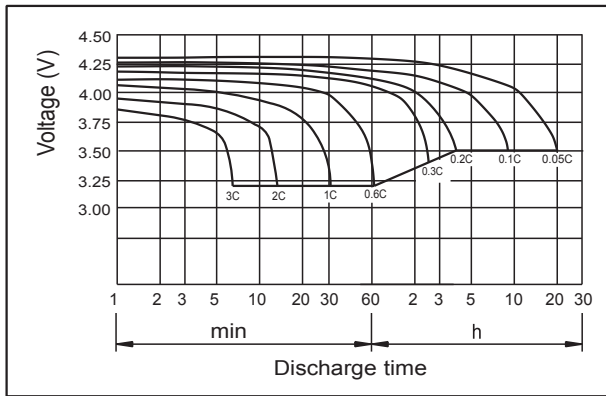
Note: The above characteristics data can be obtained within three charge or discharge cycles.

Characteristics

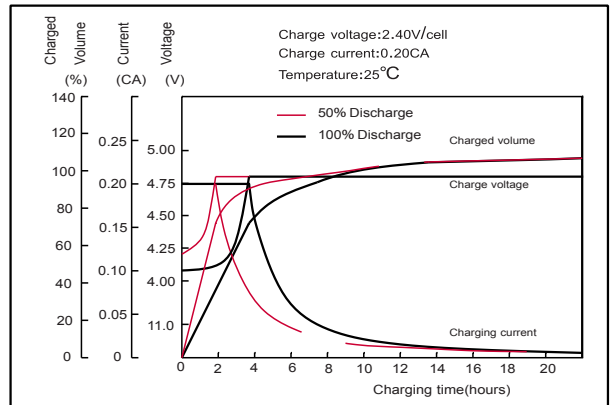
Capacity (25°C)	20HR(3.50V)	9Ah
	10HR(3.50V)	8.4Ah
	1HR(3.20V)	5.4Ah
Terminal type		T2/T1
Internal resistance (Fully charged,25°C)		Approx.9m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	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)		4.50 to 4.60V Temperature compensation: -6mV/°C
Cyclic charging voltage(25°C)		4.80 to 5.00V Temperature compensation: -10mV/°C
Maximum charging current		2.7A
Maximum discharge current		135A(5 sec.)
Designed floating life(20°C)		5 years

NP4-9Ah 4V9Ah

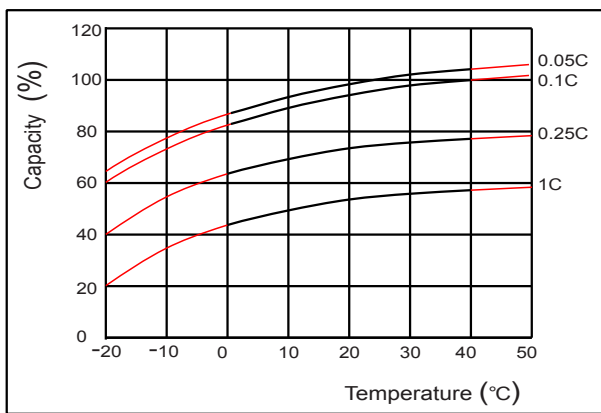
● **Discharge characteristics(25°C)**



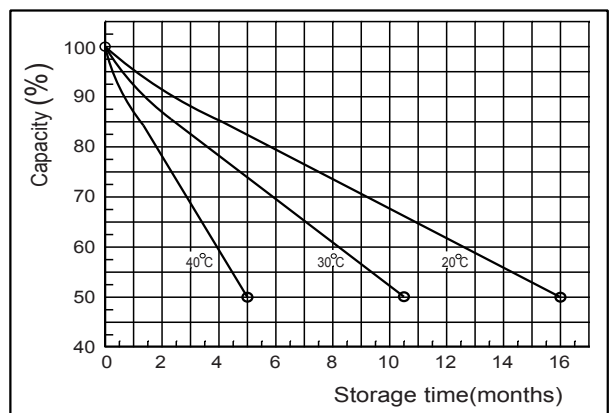
● **Charging characteristics (25°C)**



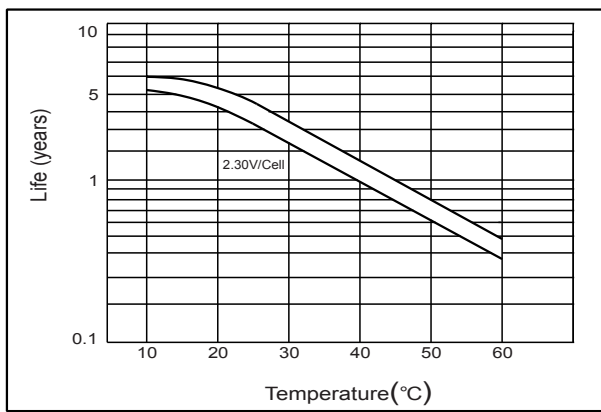
● **Effect of temperature on capacity**



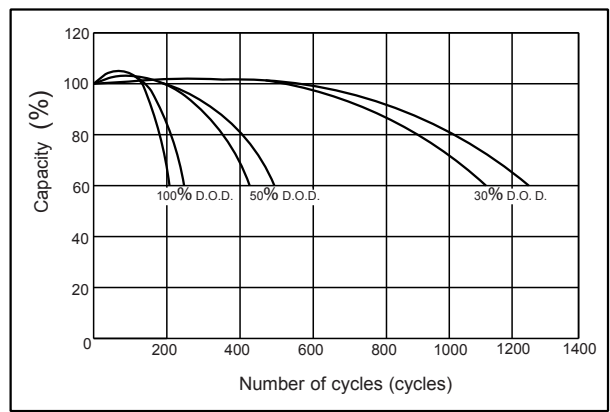
● **Self-discharge characteristics**



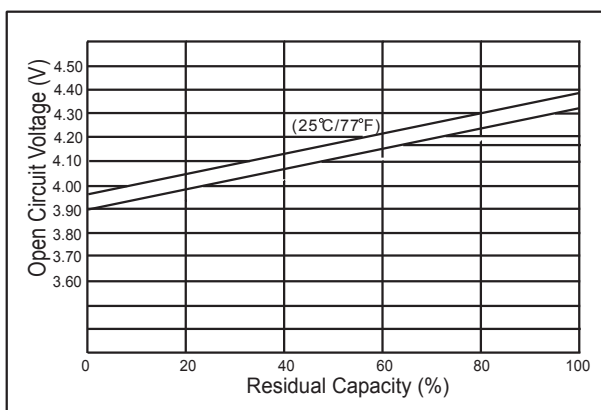
● **Floating life on temperature**



● **Cycle life on D.O.D(25°C)**



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



● **The relationship for Charging voltage and Temperature**

