

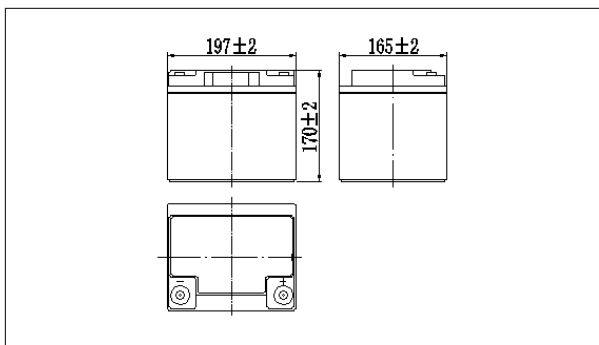
## NP12-38Ah 12V38Ah

### ● Specifications

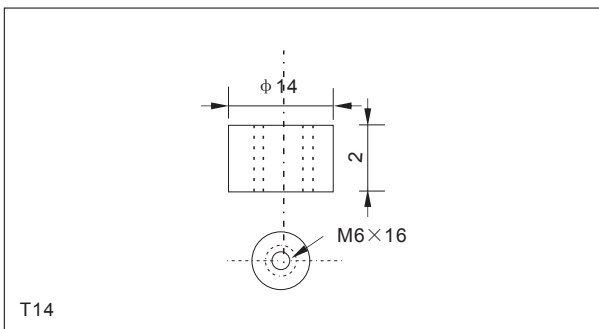
Nominal Voltage		12V
Rated capacity (10 hour rate)		38Ah
Dimensions	Length	197±2mm(7.76inch)
	Width	165±2mm(6.50inch)
	Height	170±2mm(6.69inch)
	Total Height	170±2mm(6.69inch)
Approx. Weight		11.8kg(26.0lbs)±4%



### ● Outer dimensions (mm)



### ● Terminal Type (mm)



### ● Characteristics

Capacity (25°C)	10HR(10.8V)	38Ah
	3HR(10.8V)	28.5Ah
	1HR(10.5V)	21Ah
Terminal type		T14
Internal resistance (Fully charged, 25°C)		Approx. 10m Ω
Capacity affected by temperature (10HR)	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)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		11.4A
Maximum discharge current		380A(5 sec.)
Designed floating life(20°C)		10years

### ● 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	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	82.8	63.8	38.2	23.5	13.9	10.0	7.98	6.82	4.69	3.87	2.05
9.90V	80.4	62.3	37.4	23.1	13.8	9.94	7.94	6.78	4.66	3.86	2.05
10.2V	77.0	60.0	36.3	22.5	13.7	9.87	7.88	6.73	4.63	3.85	2.04
10.5V	73.7	58.0	35.4	21.8	13.5	9.80	7.83	6.69	4.60	3.83	2.03
10.8V	69.6	54.9	34.1	21.1	13.1	9.51	7.59	6.49	4.46	3.80	2.01

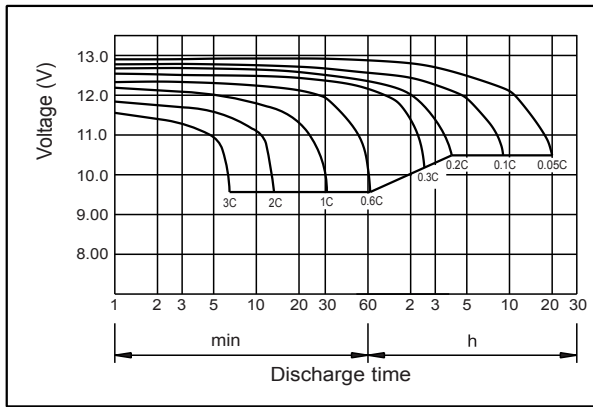
### ● Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	895	701	428	268	161	118	93.9	80.6	55.7	46.2	24.6
9.90V	868	684	420	264	160	117	93.3	80.2	55.4	46.1	24.6
10.2V	832	659	407	257	158	116	92.7	79.6	55.0	46.0	24.5
10.5V	796	636	397	249	156	115	92.1	79.1	54.6	45.7	24.3
10.8V	752	603	383	241	152	112	89.3	76.7	53.0	45.4	24.2

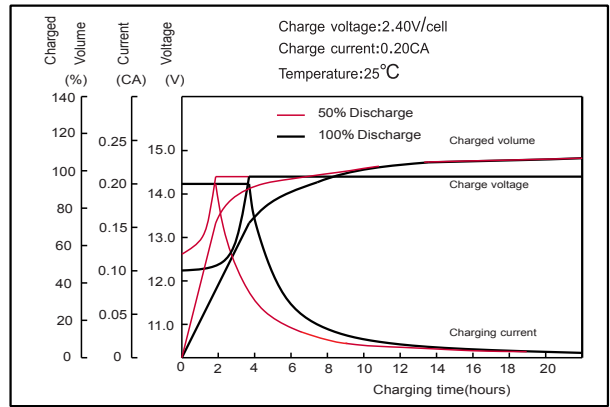
Note: The above characteristics data can be obtained within three charge or discharge cycles.

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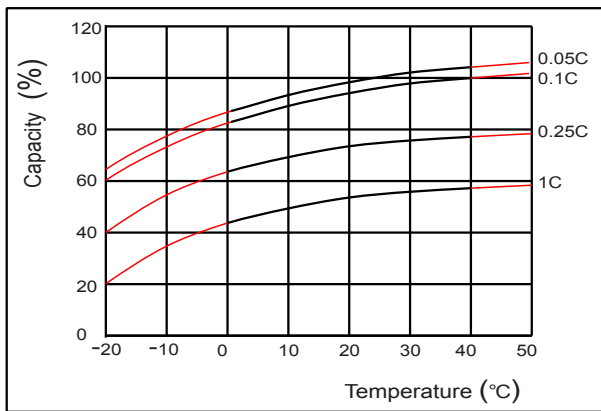
● **Discharge characteristics(25°C)**



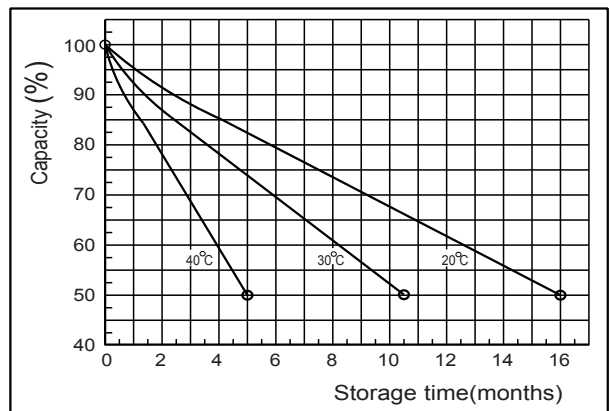
● **Charging characteristics (25°C)**



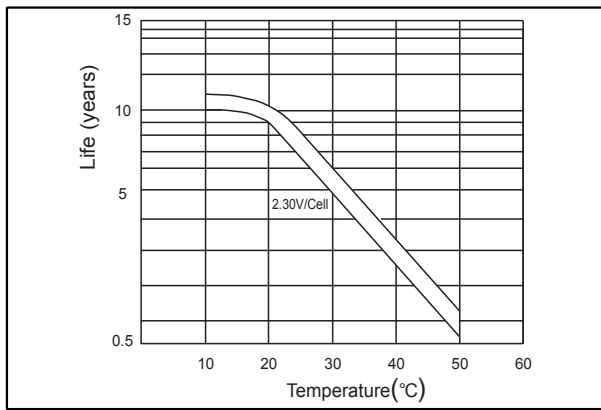
● **Temperature effects on Capacity**



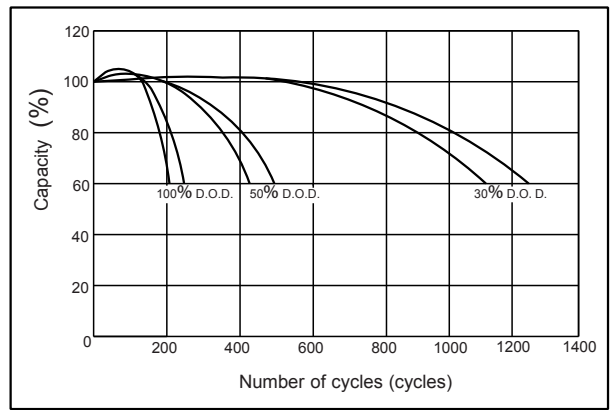
● **Self-discharge characteristics**



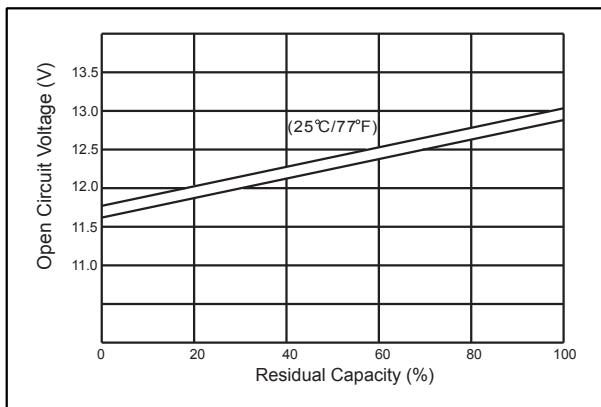
● **Floating life on Temperature**



● **Cycle life on D.O.D (25°C)**



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



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

