UNIVERSAL BATTERY

UB-12U12.0 (12V12.0AH)



Capacity & electrical

Capacity (25°C)	
20HR(10.5V)	12Ah
10HR(10.5V)	11Ah
1HR(9.60V)	7.2Ah
Terminal type	T2/T10S
Internal resistance (Fully charged,25°C)	Approx.19mΩ
Maximum charging current	3.6A
Maximum discharge current	180A(5 sec.)
Designed floating life(20°C)	5 years

Operating temperatures

Nominal operating temperature	25°C±3°C(77°F±5°F)
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)

Charging parameters

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

Self-discharge (25°C)

3 months	Remaining Capacity:91%
6 months	RemainingCapacity:82%
12 months	RemainingCapacity:65%

Capacity affected by temperature (20HR)

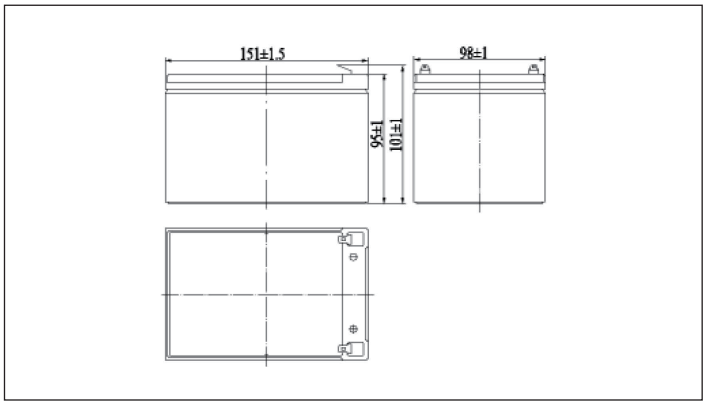
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

Specifications & technical details

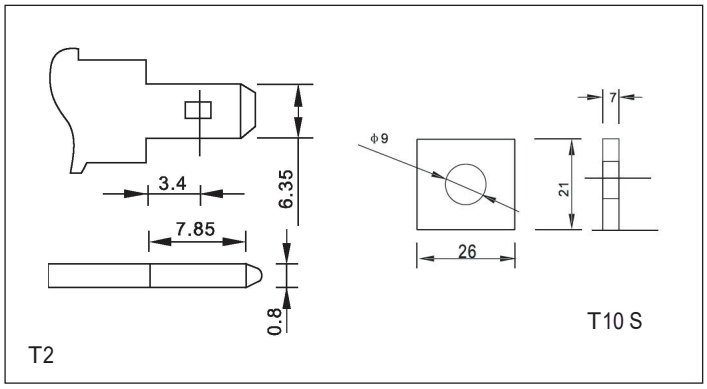
Specifications

Nominal Voltage	12V	Length	151±1 .5mm(5.94inch)
Rated capacity (20 hour rate)	12Ah	Width	98± 1mm(3.86inch)
Approx. Weight	3.4kg(7.5lbs)±4%	Height	95± 1mm(3. 74inch)
		Total Height	101±1 mm(3.98inch)

Outer dimensions (mm)



Terminal Type (mm)



Construction

Component	Positive plate	Negativeplate	Container	Cover	Separator	Electrolyte	Safetyvalve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuricacid	Rubber	Copper

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	Jh	4h	5h	10h	20h
9.60V	45.8	29.0	22.7	12.8	7.86	4.3	2.97	2.46	2.09	1.14	0.61
9.90V	44.5	28.2	22.1	12.5	7.74	4.27	2.96	2.45	2.08	1.13	0.61
10.2V	42.6	27.0	21.3	12.1	7.55	4.24	2.94	2.43	2.07	1.13	0.60
10.5V	40.8	25.8	20.6	11.8	7.40	4.17	2.92	2.41	2.05	1.12	0.60
10.8V	38.5	24.4	19.5	11.4	7.17	4.07	2.83	2.34	1.99	1.10	0.59

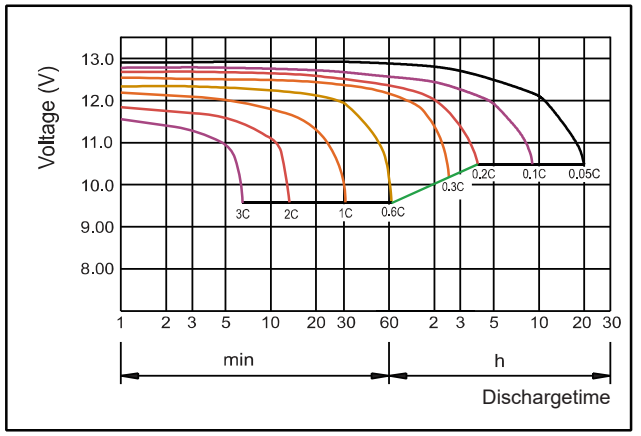
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	5min	10min	15min	30min	60min	2h	Jh	4h	5h	10h	20h
9.60V	512	328	259	146	91.0	50.3	35.3	29.3	25.0	13.6	7.31
9.90V	496	318	252	144	89.7	50.0	35.1	29.1	24.8	13.6	7.28
10.2V	476	305	243	139	87.4	49.6	34.9	28.9	24.7	13.5	7.24
10.5V	455	292	235	136	85.6	48.8	34.6	28.7	24.5	13.4	7.20
10.8V	430	275	222	131	83.0	47.6	33.6	27.9	23.8	13.2	7.06

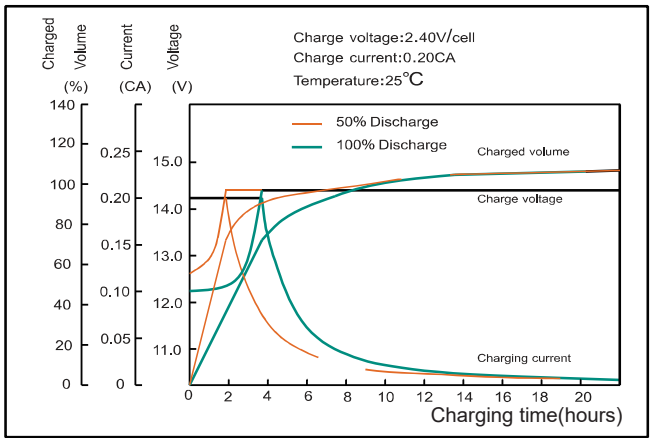
Note: The above characteristics data can be obtained within three charge or discharge cycles.

Performance characteristics

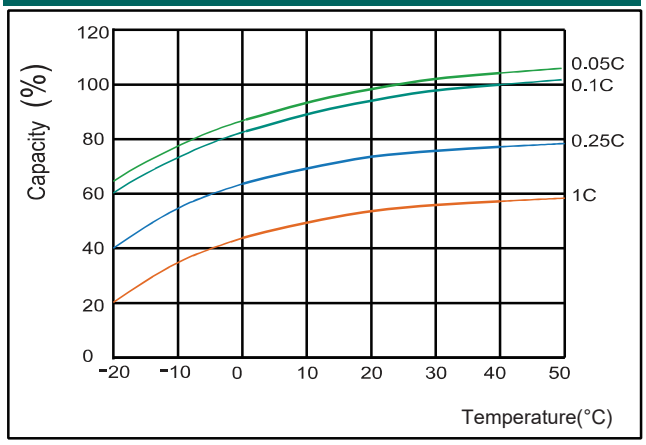
Discharge characteristics (25°C)



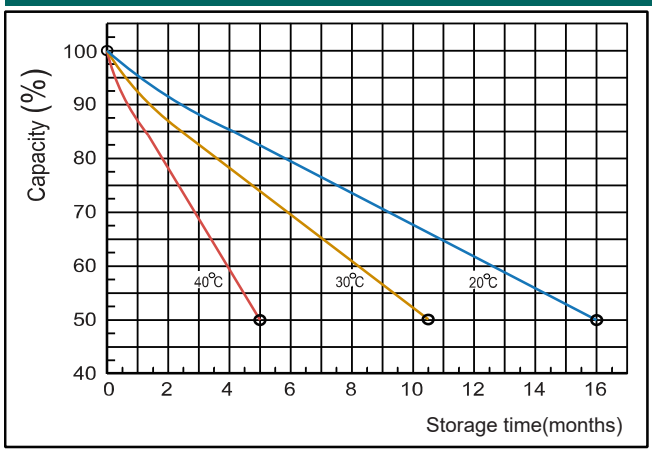
Charge characteristics (25°C)



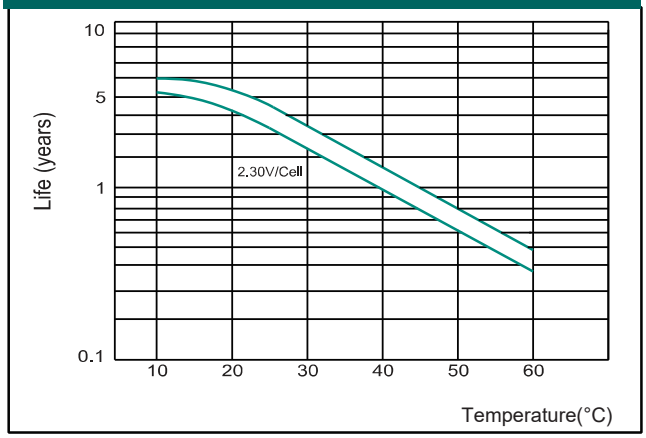
Effect of temperature on capacity



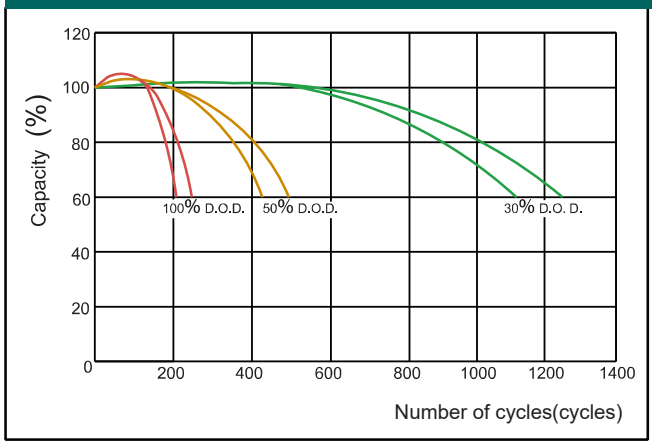
Self-discharge characteristics



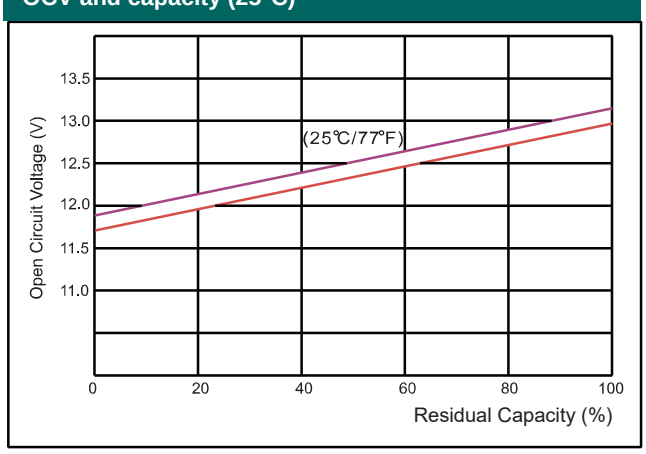
Floating life and temperature



Cycle life vs. D.O.D. (25°C)



OCV and capacity (25°C)



Charging voltage and temperature

