

BC6-12Ah 6V12Ah

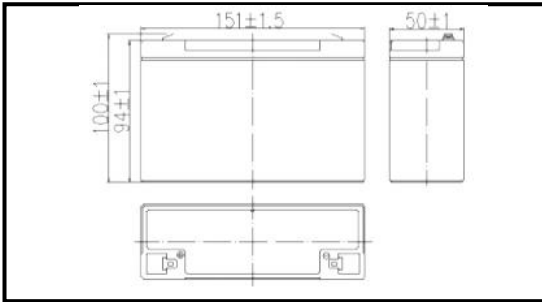
Valve Regulated Lead Acid Battery

Specifications

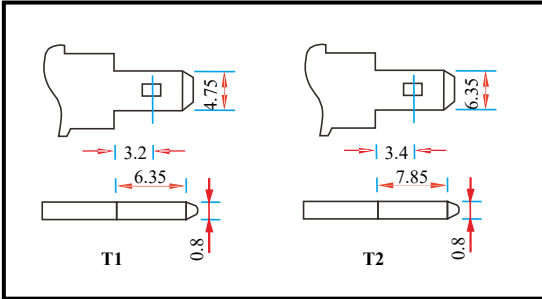
Nominal voltage	6V (3 cells per unit)	
Rated capacity (20HR)	12Ah/5.25V	
Dimensions	Length	151±1.5mm (5.94inch)
	Width	50±1mm (1.97inch)
	Height	94±1mm (3.70inch)
	Total height	100±1mm (3.94inch)
Approx. weight	1.70kg (3.75lbs)±4%	



Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	20HR (5.25V)	12Ah
	10HR (5.25V)	11Ah
	1HR (4.80V)	7.2Ah
Terminal type		T1/T2
Internal resistance (Fully charged, 25°C)		Approx. 10mΩ
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)		6.80 to 6.90V Temperature compensation: -9mV/°C/Block
Cyclic charging voltage (25°C)		7.25 to 7.50V Temperature compensation: -15mV/°C/Block
Maximum charging current		3.6A
Maximum discharge current		180A (5 sec.)
Design life	5 years for floating (25°C)	
	Eurobat (20°C): 3-5 years, standard commercial.	

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: Ampere/Block (at 25°C, 77°F)

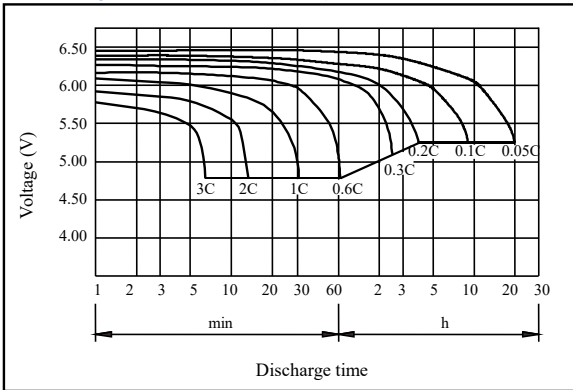
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
4.80V	45.8	29.0	22.7	12.8	7.86	4.30	2.97	2.46	2.09	1.14	0.61
4.95V	44.5	28.2	22.1	12.5	7.74	4.27	2.96	2.45	2.08	1.13	0.61
5.10V	42.6	27.0	21.3	12.1	7.55	4.24	2.94	2.43	2.07	1.13	0.60
5.25V	40.8	25.8	20.6	11.8	7.40	4.17	2.92	2.41	2.05	1.12	0.60
5.40V	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: Watt/Block (at 25°C, 77°F)

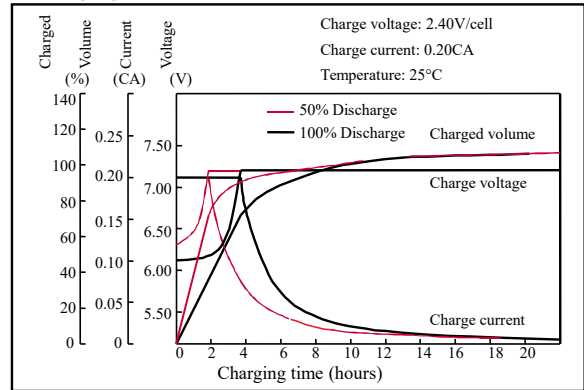
F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
4.80V	256	164	129	73.2	45.5	25.2	17.7	14.7	12.5	6.82	3.65
4.95V	248	159	126	71.8	44.8	25.0	17.6	14.6	12.4	6.79	3.64
5.10V	238	152	122	69.6	43.7	24.8	17.4	14.5	12.3	6.76	3.62
5.25V	228	146	117	67.9	42.8	24.4	17.3	14.4	12.3	6.72	3.60
5.40V	215	138	111	65.4	41.5	23.8	16.8	13.9	11.9	6.58	3.53

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

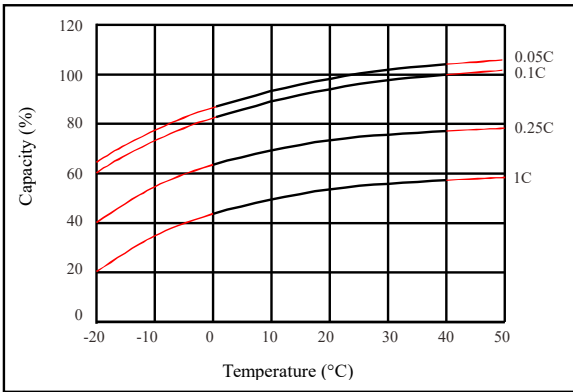
● Discharge characteristics (25°C)



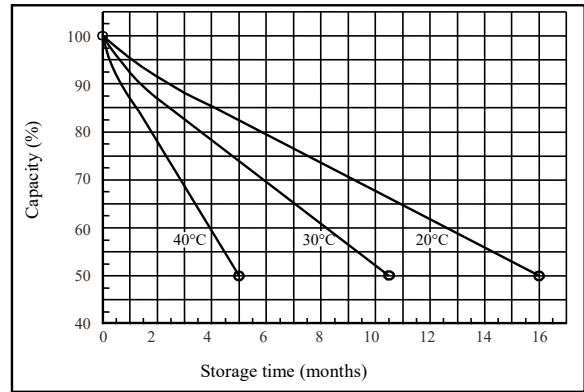
● Charging characteristics (25°C)



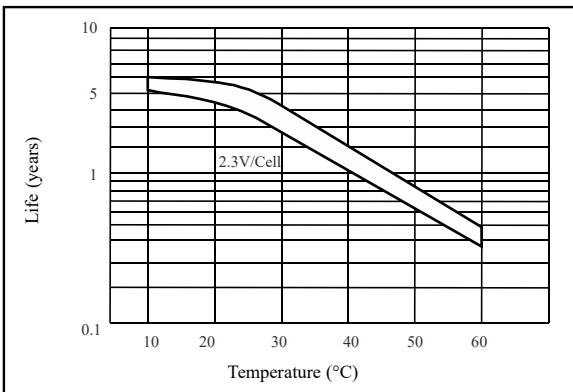
● Temperature effects on capacity



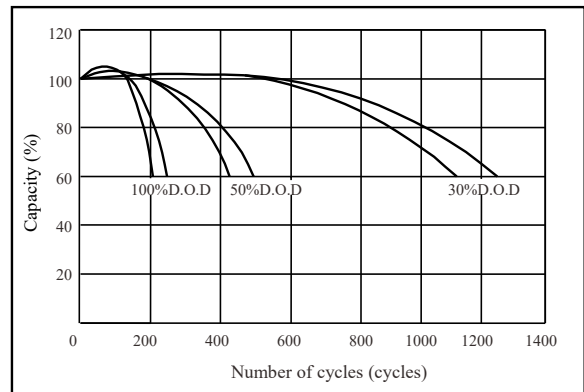
● Self-discharge characteristics



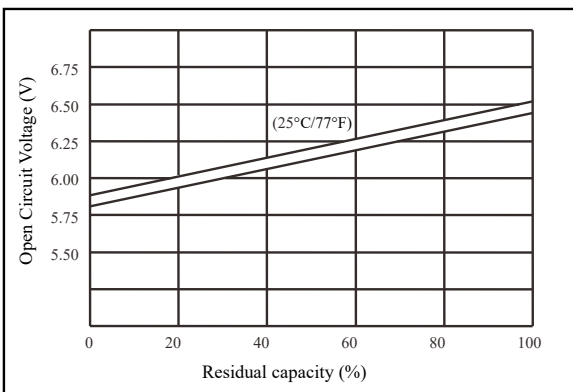
● Floating life on temperature



● Cycle life on D.O.D (25°C)



● Relationship for OCV and capacity (25°C)



● Relationship for charging voltage and temperature

