

BST-2V 500Ah

Applications

- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting Auto control system
- Solar/wind generating storage cyclic
- Other general purpose



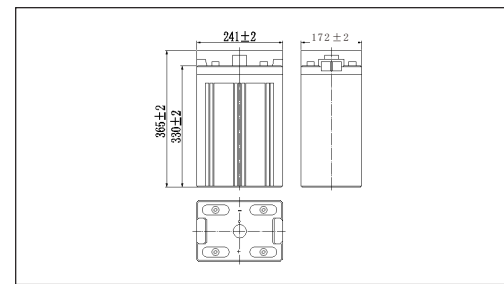
● Characteristics

Capacity (25°C)	10HR(1.8V)	500Ah
	3HR(1.80V)	375Ah
	1HR(1.75V)	275Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.55m 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)		2.25 to 2.30V Temperature compensation: -3mV/°C
Cyclic charging voltage (25°C)		2.40 to 2.45V Temperature compensation: -5mV/°C
Maximum charging current		100A
Maximum discharge current		3000A (5 sec.)
Designed floating life (20°C)		18 years

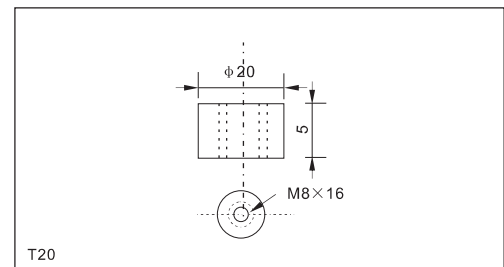
● Specifications

Nominal Voltage		2V
Rated capacity (10 hour rate)		500Ah
Dimensions	Length	241 ± 2mm (9.49inch)
	Width	172 ± 2mm (6.73inch)
	Height	330 ± 2mm (12.99inch)
	Total Height	365 ± 2mm (14.37inch)
Approx. Weight		28.7kg (63.26lbs) ± 3%

● 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	Gel	Rubber	Copper

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

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	625	435	300	180	131	103	85.7	75.5	60.2	50.9	26.7
1.65V	610	426	294	179	130	102	85.2	75.0	59.8	50.8	26.7
1.70V	588	413	285	178	129	102	84.6	74.5	59.4	50.7	26.6
1.75V	568	403	279	175	128	101	84.0	74.0	59.0	50.4	26.4
1.80V	538	388	270	170	125	98.0	81.5	71.8	57.2	50.0	26.3

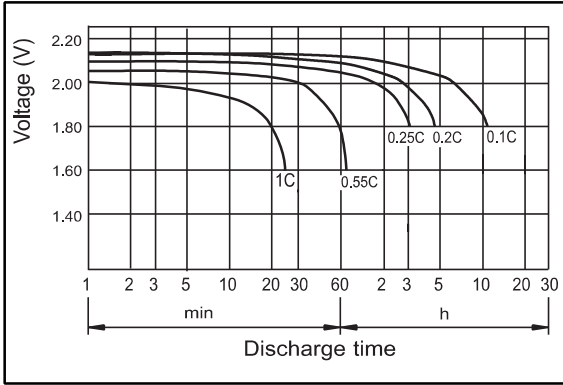
● Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	1144	813	570	348	256	202	169	149	120	101	53.4
1.65V	1116	797	559	346	254	201	168	148	119	101	53.3
1.70V	1075	773	542	343	253	199	167	147	118	101	53.2
1.75V	1039	754	530	337	251	198	165	146	117	100	52.9
1.80V	984	726	513	329	246	192	161	141	114	99.5	52.5

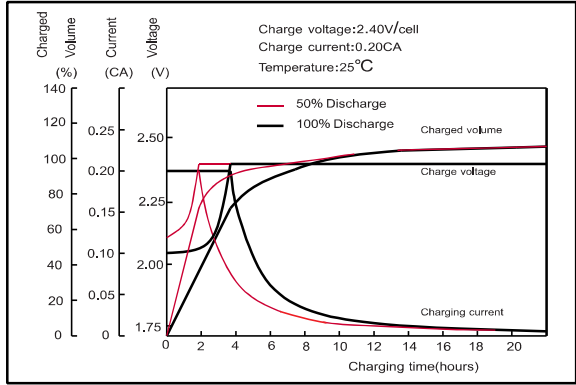
Note: The above characteristics data can be obtained within three charge or discharge cycles.

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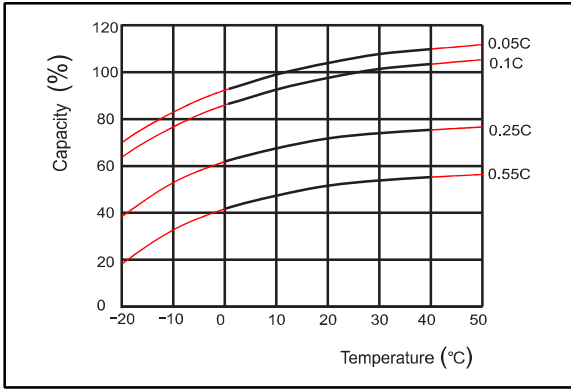
Discharge characteristics(25°C)



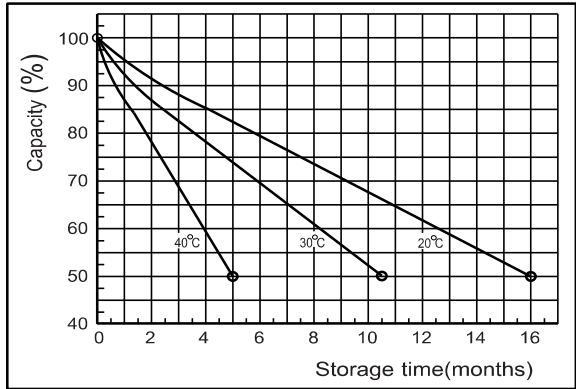
Charging characteristics



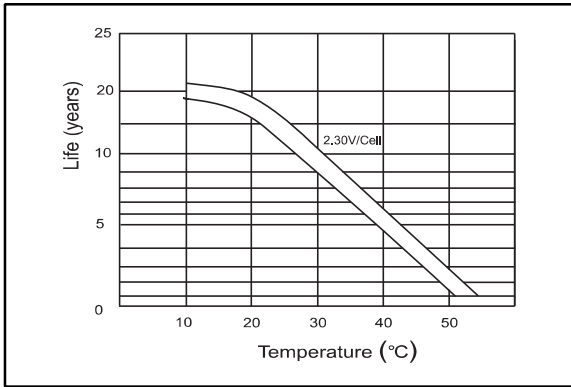
Effect of Temperature on Capacity



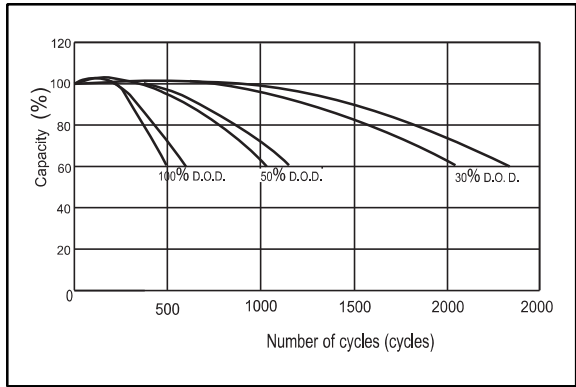
Self-discharge characteristics



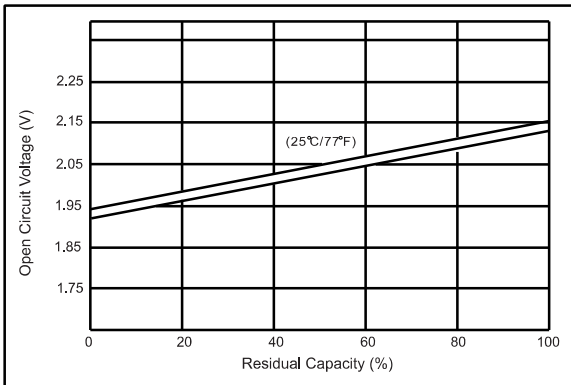
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

