

# SB12-2.3/SB12-2.3V0 (12V2.3Ah)

## Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Alarm and security system
- Communication power supply
- DC power supply



## Certificates

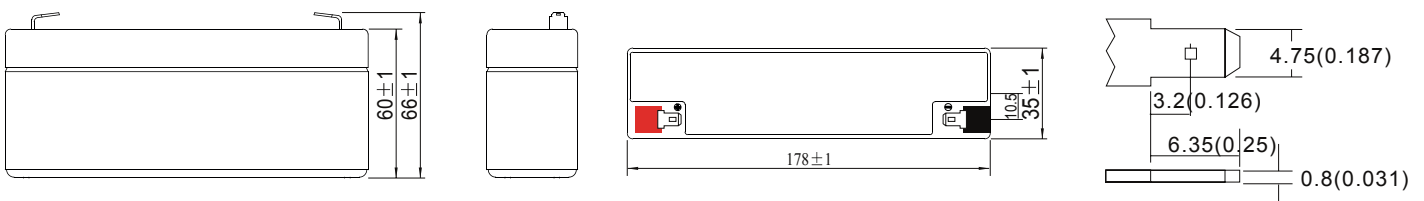


## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	2.3Ah (C <sub>20</sub> 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 0.69A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	0.97kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	T1	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 HB/UL94 V0	<b>Self Discharge</b>	SB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (25°C)</b>	2.30Ah/0.115A, 20hr, 1.80V/cell 2.14Ah/0.214A, 10hr, 1.80V/cell 1.93Ah/0.386A, 5hr, 1.75V/cell 1.69Ah/0.563A, 3hr, 1.75V/cell 1.40Ah/1.40A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	6-9 years according to EUROBAT
<b>Max. Discharge Current</b>	35A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 60mΩ		
<b>Operating Temp. Range</b>	Discharge:    -15~50°C Charge:        0~40°C Storage:       -15~40°C		

## Dimensions

- **T1 Terminal**  
Unit: mm [inches]





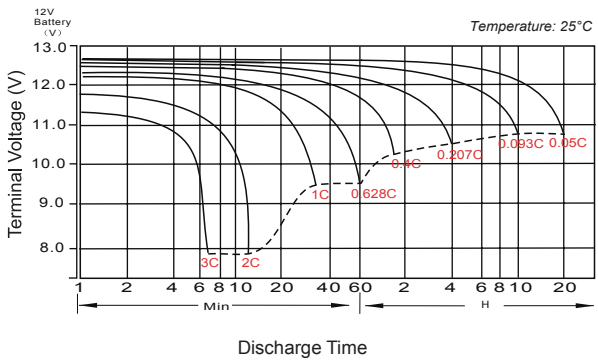
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	4.42	3.08	2.54	2.20	1.77	1.36	1.11	0.679	0.517	0.425	0.361	0.312	0.248	0.207	0.114
1.80V/cell	5.43	3.67	2.94	2.49	1.96	1.48	1.20	0.721	0.544	0.447	0.376	0.326	0.258	0.214	0.115
1.75V/cell	6.43	4.15	3.25	2.71	2.09	1.57	1.26	0.752	0.563	0.461	0.386	0.334	0.265	0.218	0.116
1.70V/cell	7.30	4.58	3.51	2.91	2.19	1.63	1.31	0.783	0.581	0.472	0.396	0.342	0.269	0.222	0.118
1.65V/cell	8.05	4.93	3.72	3.06	2.29	1.70	1.37	0.806	0.596	0.482	0.405	0.349	0.273	0.225	0.120
1.60V/cell	8.45	5.13	3.87	3.15	2.35	1.74	1.40	0.831	0.610	0.494	0.413	0.356	0.279	0.229	0.121

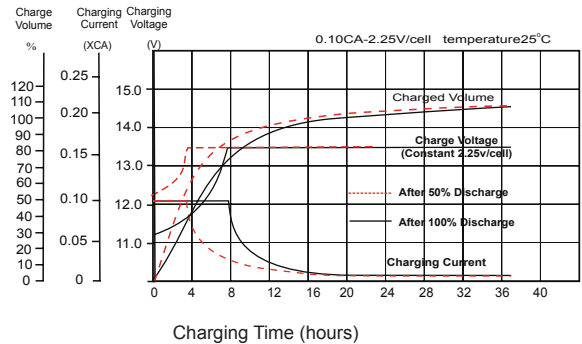
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	8.33	5.86	4.88	4.27	3.45	2.66	2.19	1.34	1.03	0.848	0.722	0.627	0.500	0.416	0.230
1.80V/cell	10.1	6.93	5.61	4.79	3.79	2.89	2.34	1.42	1.07	0.886	0.748	0.650	0.515	0.428	0.231
1.75V/cell	11.8	7.76	6.13	5.17	4.02	3.05	2.45	1.47	1.11	0.908	0.764	0.662	0.526	0.434	0.232
1.70V/cell	13.3	8.46	6.58	5.51	4.19	3.15	2.54	1.52	1.14	0.925	0.778	0.674	0.530	0.439	0.235
1.65V/cell	14.5	8.99	6.87	5.73	4.33	3.25	2.63	1.56	1.16	0.940	0.792	0.684	0.536	0.443	0.237
1.60V/cell	14.9	9.24	7.08	5.84	4.41	3.29	2.67	1.60	1.18	0.957	0.803	0.694	0.545	0.448	0.237

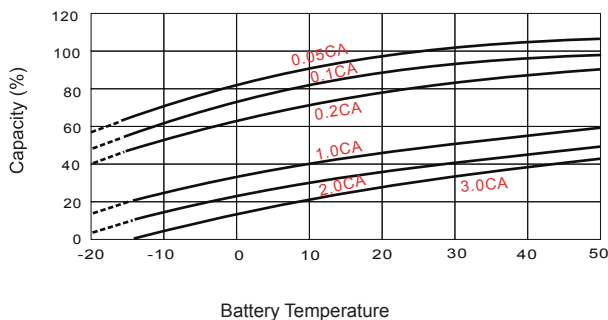
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

