

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



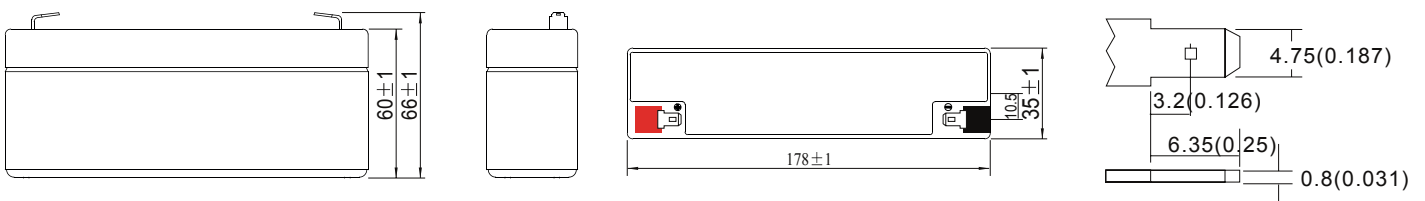
Specifications

Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Nominal Capacity	2.3Ah (C ₂₀ 1.80V/cell)	Cycle Use	Initial Charging Current less than 0.69A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	0.97kg	Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
Terminal	T1	Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Container Material	ABS UL94 HB/UL94 V0	Self Discharge	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.
Rated Capacity (25°C)	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	Life Expectancy	6-9 years according to EUROBAT
Max. Discharge Current	35A (5s)		
Internal Resistance / Impedance (1kHz)	Approx. 60mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C		

Dimensions

■ T1 Terminal

Unit: mm | Dimensions: 178 Length X 35 Width X 60 Height (66 Height incl. Terminal)





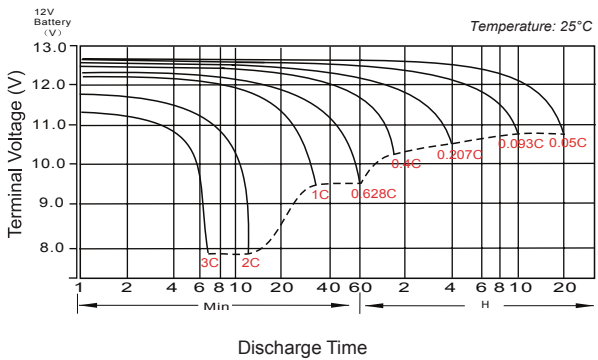
Constant Current Discharge (Amperes) at 25°C

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

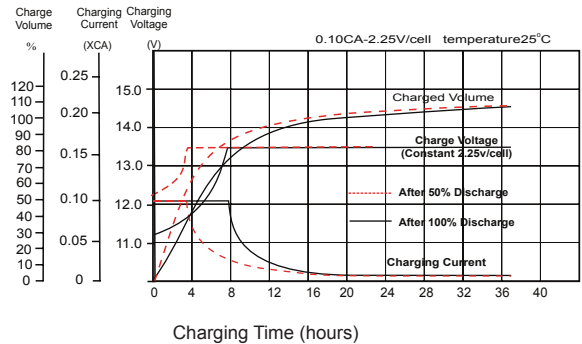
Constant Power Discharge (Watts/cell) at 25°C

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

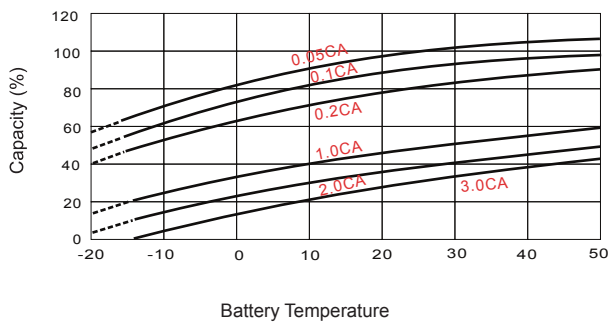
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

