

SBL4.5-12LV0 (12V4.5Ah)

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

Conform to
IEC60896-21&22

Specifications

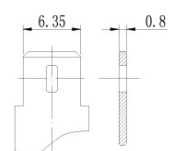
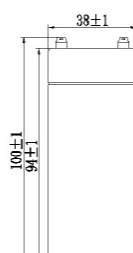
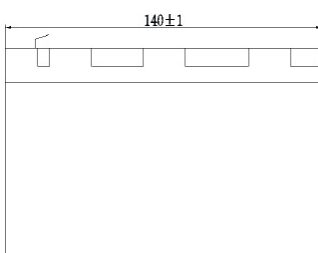
Nominal Voltage	12V	Operating Temp. Range	Discharge:	-20~50°C
Nominal Capacity	4.5Ah (C ₂₀ 10.5V)		Charge:	-10~50°C
Approx. Weight	1.25kg		Storage:	-20~50°C
Terminal	T2	Float Charge	2.285V/cell ± 0.5 % @ 20°C	
Container Material	ABS UL94 V0		Charging Current:	0.1-0.2C
Rated Capacity (20°C)	4.5Ah/0.225A, 20hr, 10.5V		Temperature coefficient:	-3mV/cell/°C
	3.9Ah/0.39A, 10hr, 10.5V	Capacity affected by Temp.	40°C	103%
	3.55Ah/0.71A, 5hr, 10.5V		25°C	100%
	3.15Ah/1.05A, 3hr, 10.5V		0°C	86%
	2.73Ah/2.73A, 1hr, 9.6V	Self Discharge	SSB batteries may be stored for up to 6 months at 20°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Max. Discharge Current	45A (5 sec.)	Life Expectancy	6-9 years according to EUROBAT	
Internal Resistance / Impedance (1kHz)	Approx. 40mΩ			
Nominal Oper. Temp. R.	20±3°C			



Dimensions

■ T2 Terminal

Unit: mm | Dimensions: 140±1 Length X 38±1 Width X 94±1 Height (100±1 Height incl. Terminal)



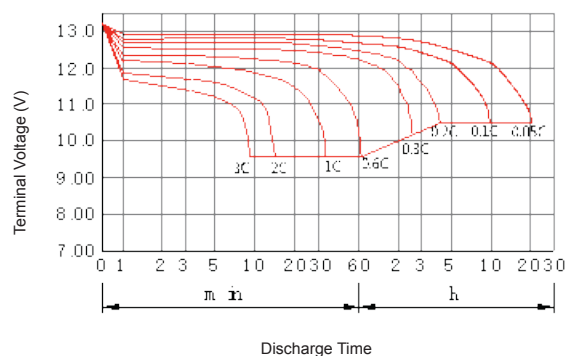
Constant Current Discharge (Amperes) at 20°C

F.V/TIME	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
9.60V	16.0	10.1	7.98	4.5	2.73	1.49	1.07	0.86	0.73	0.40	0.228
9.90V	15.5	9.78	7.79	4.36	2.69	1.48	1.06	0.85	0.72	0.39	0.227
10.2V	14.8	9.37	7.50	4.23	2.62	1.47	1.06	0.85	0.72	0.39	0.226
10.5V	14.2	8.97	7.25	4.13	2.57	1.45	1.05	0.84	0.71	0.39	0.225
10.8V	13.4	8.47	6.86	3.98	2.49	1.41	1.02	0.81	0.69	0.38	0.221

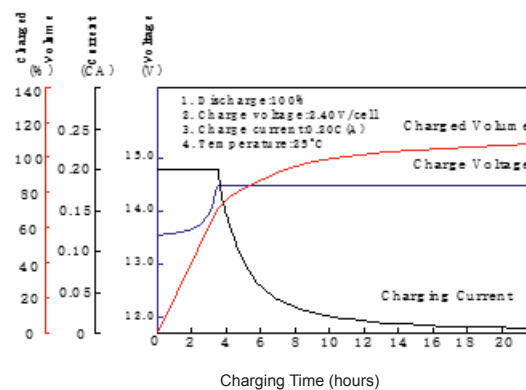
Constant Power Discharge (Watts/cell) at 20°C

F.V/TIME	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	29.67	19.00	15.17	11.90	8.50	6.95	5.27	2.92	2.12	1.70	1.45	0.94	0.79	0.46
1.65V/cell	28.83	18.33	14.80	11.62	8.33	6.83	5.18	2.90	2.10	1.68	1.44	0.94	0.79	0.46
1.70V/cell	27.67	17.67	14.25	11.22	8.08	6.63	5.05	2.87	2.10	1.68	1.43	0.93	0.79	0.45
1.75V/cell	26.50	16.83	13.77	10.88	7.88	6.48	4.95	2.82	2.08	1.67	1.42	0.92	0.78	0.45
1.80V/cell	25.00	15.92	13.03	10.37	7.60	6.27	4.80	2.75	2.02	1.62	1.38	0.90	0.77	0.44

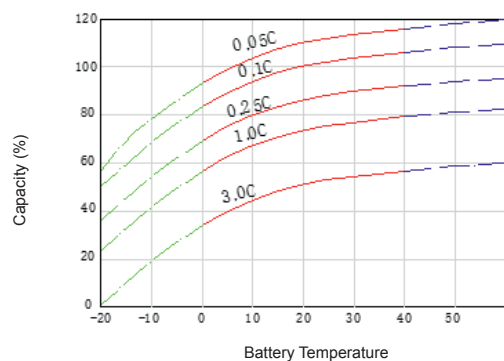
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

