

# CBL9-12

12V 9AH

General Purpose



## CBL9-12



## Physical Specification

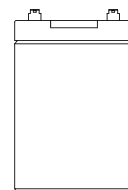
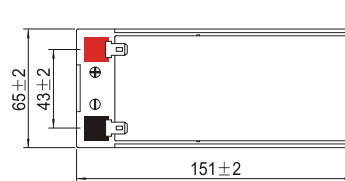
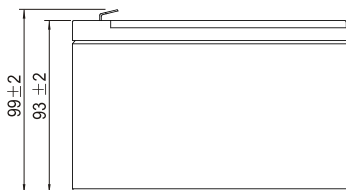
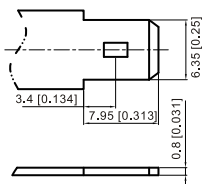
Part Number	CBL9-12
Length	151 ± 2 mm
Width	65 ± 2 mm
Container Height	93.5 ± 2 mm
Total Height (with terminal)	99 ± 2 mm
Approx Weight	2.50 kg

## Specifications

	Nominal Voltage	12V
	Nominal Capacity (20HR)	9AH
Terminal Type	Standard Terminal	T2
	Optional Terminal	T1
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	20hr, 1.80V/cell, 25°C	9.00 AH/0.425A
	10hr, 1.80V/cell, 25°C	8.37 AH/0.791A
	5hr, 1.75V/cell, 25°C	7.22 AH/1.45A
	1hr, 1.60V/cell, 25°C	5.34 AH/5.34A
Max Discharge Current	127.5A (5s)	
Internal Resistance	Approx 18mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C
		Charge: 0 ~ 40°C
		Storage: -15 ~ 40°C
	Nominal Operating Temp. Range	25 ± 3°C
	Cycle Use	Initial Charging Current less than 2.55A. Voltage 14.4V ~ 15.0V Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V Temp. Coefficient -20mV/°C
Capacity affect by Temperature	40°C	103%
	25°C	100%
	0°C	86%
Design Floating Life at 20°C	5 Years	
Self Discharge	Canbat batteries may be stored for up to 6 months at 25°C(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

## Dimensions

### T2 Terminal



ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

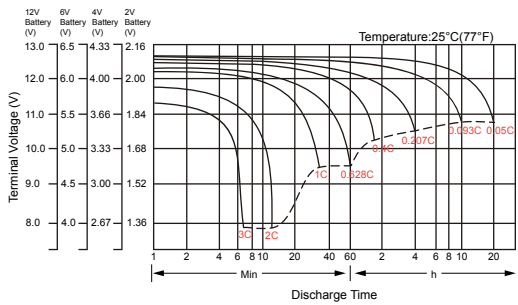
## Constant Current Discharge (Amperes) at 20°C

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.2	12.4	10.3	8.90	6.88	5.07	4.27	2.53	1.98	1.61	1.31	1.14	0.918	0.767	0.421
1.80V/cell	21.7	15.9	12.4	10.5	8.12	5.90	4.79	2.76	2.13	1.72	1.41	1.22	0.973	0.791	0.425
1.75V/cell	24.5	17.5	13.6	11.3	8.43	6.12	5.01	2.86	2.17	1.76	1.45	1.25	0.990	0.812	0.429
1.70V/cell	27.0	19.0	14.5	11.9	8.78	6.36	5.17	2.93	2.23	1.80	1.48	1.28	1.004	0.828	0.437
1.65V/cell	29.7	20.5	15.4	12.6	9.26	6.52	5.29	2.98	2.32	1.86	1.52	1.31	1.020	0.845	0.443
1.60V/cell	32.8	22.3	16.5	13.5	9.78	6.80	5.34	3.10	2.39	1.92	1.57	1.34	1.030	0.854	0.445

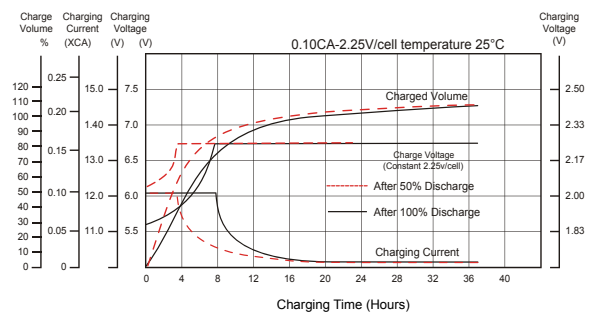
## Constant Power Discharge (Watts) at 20°C

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.6	23.0	19.2	16.8	13.1	9.75	8.25	4.91	3.86	3.14	2.57	2.24	1.81	1.52	0.834
1.80V/cell	39.3	29.0	22.9	19.5	15.2	11.2	9.19	5.32	4.13	3.34	2.75	2.39	1.92	1.56	0.841
1.75V/cell	43.4	31.3	24.7	20.8	15.7	11.6	9.57	5.50	4.18	3.40	2.81	2.45	1.94	1.60	0.848
1.70V/cell	46.4	33.4	26.0	21.7	16.2	12.0	9.84	5.62	4.29	3.49	2.88	2.49	1.97	1.63	0.863
1.65V/cell	50.5	35.7	27.4	22.9	17.0	12.2	9.99	5.67	4.46	3.59	2.95	2.54	2.00	1.66	0.873
1.60V/cell	54.4	37.9	28.9	24.1	17.8	12.6	10.0	5.89	4.57	3.69	3.03	2.59	2.01	1.68	0.877

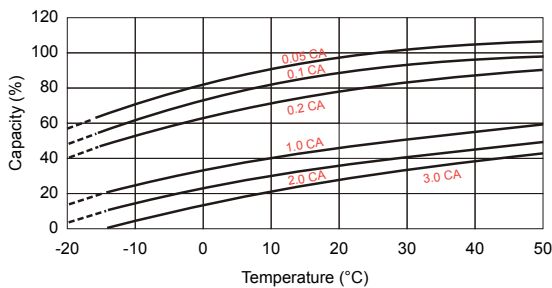
### Discharge Characteristics



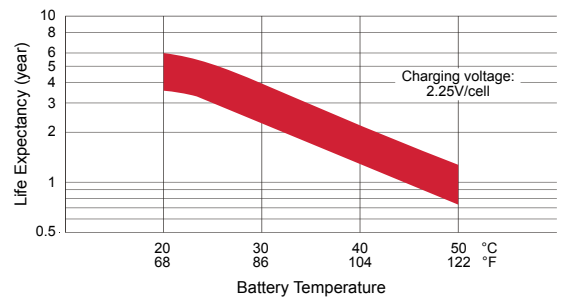
### Float Charging Characteristics



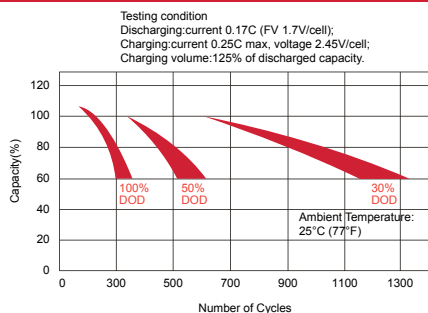
### Temperature Effects in Relation to Battery Capacity



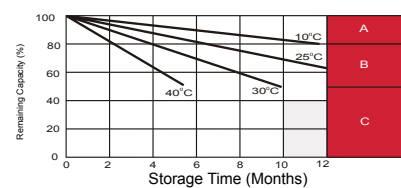
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



- A** No supplementary required  
(Carryout supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8 ~ 10 hours at limited current 0.05 CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE