



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



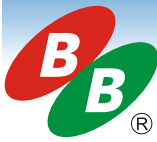
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# VRLA Rechargeable Battery

## HR4-12



### FEATURES

- Maintenance free(no water topping-up required).
- No free acid(Non-spillable battery).
- Low self-discharge rate, lower than 3% capacity loss per month.
- Can be used in any orientation(excluding used inverted).
- The battery is designed for high rate usage.
- Absorbent Glass Mat technology for efficient gas recombination.
- The power density at 5 min~15min discharging rate is 30% higher than BP series.






### APPLICATION

- UPS
- Toy-Cars
- Power Packs
- Laboratory Equipment
- Fishing Lights

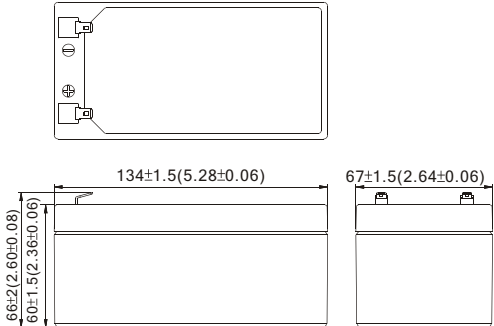
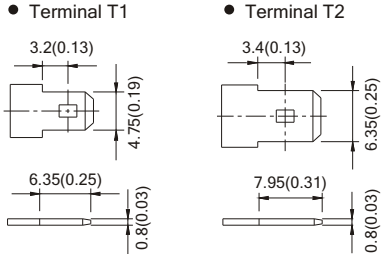


### SPECIFICATIONS

Nominal Voltage	12 V
Nominal Capacity	3.5Ah @ 10 hour rate F.V.(1.75V/cell)
Approx. Weight	1400g(3.09lbs.)
Terminals	T1 (Faston Tab 187) T2 is optional
Internal Resistance	≤30mΩ (Fully Charged )
Max. Discharge Current	52.5 A (5 sec.)
Max. Charge Current	1.05 A
Operating Temperature Range	Charge : 0°C~40°C(32°F~104°F) Discharge : -20°C~50°C(-4°F~122°F) Storage. : -20°C~40°C(-4°F~104°F)
Container Material	Standard: ABS( UL 94-HB) HR4-12 Optional: Flame Retardant ABS(UL 94-V0) HR4-12FR

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

DIMENSION(mm/inch)	OUTER DIMENSIONS	TERMINAL TYPE
<b>Length</b> 134±1.5 (5.28±0.06) <b>Width</b> 67±1.5 (2.64±0.06) <b>Container Height</b> 60±1.5 (2.36±0.06) <b>Total Height</b> 66±2.0 (2.60±0.08)		

### Constant power discharge characteristics at 25 °C/77 °F Unit: W

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	164.0	112.0	81.1	69.2	52.6	40.0	33.4	29.4	16.2
1.70V	196.0	125.0	88.2	73.3	54.8	41.5	34.5	30.1	16.5
1.60V	210.0	131.5	92.2	76.0	56.0	42.5	35.2	30.6	16.8
1.50V	216.0	134.0	94.2	77.2	56.7	43.0	35.6	30.9	16.9
1.40V	220.0	135.8	95.3	77.9	57.1	43.3	35.9	31.1	16.9
1.30V	222.0	137.0	96.0	78.4	57.4	43.5	36.1	31.2	17.0

### Constant current discharge characteristics at 25 °C/77 °F Unit: A

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	14.64	9.82	7.02	5.93	4.46	3.36	2.79	2.45	1.35
1.70V	17.82	10.96	7.63	6.29	4.64	3.49	2.89	2.51	1.38
1.60V	19.09	11.54	7.98	6.52	4.75	3.57	2.95	2.55	1.40
1.50V	19.64	11.75	8.15	6.62	4.81	3.62	2.98	2.58	1.41
1.40V	20.00	11.91	8.24	6.68	4.84	3.64	3.00	2.59	1.41
1.30V	20.18	12.02	8.30	6.72	4.86	3.66	3.02	2.60	1.42

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.