



Measures Technology Values Innovation



## VRLA Rechargeable Battery

# BPL7-12

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Low self-discharge rate
- Can be used in any orientation(excluding used inverted)
- **3.19** Long life expectancy 12+ years in float application
- Absorbent Glass Mat technology for efficient gas recombination

### APPLICATION

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

### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (0.35A, 10.5V)	7.00 Ah
	10 Hour Rate (0.665A, 10.5V)	6.65 Ah
	5 Hour Rate (1.19A, 10.5V)	5.95 Ah
	30 Min Rate (7.00A, 7.8V)	3.50 Ah
Approx. Weight	2600g(5.73lbs.)	
Terminals	T2 (Faston Tab 250) T1 is optional	
Max. Discharge Current	105 A (5 sec.)	
Max. Charge Current	2.1 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)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤25mΩ (Fully Charged)	



### CONTAINER MATERIAL

● Standard: ABS( UL 94-HB) **3.20**

Model Name: BPL7-12

● Optional: Flame Retardant ABS (UL 94-V0)

Model Name: BPL7-12FR

Certificate as below:

MH19884

Compliance of the standards as below:

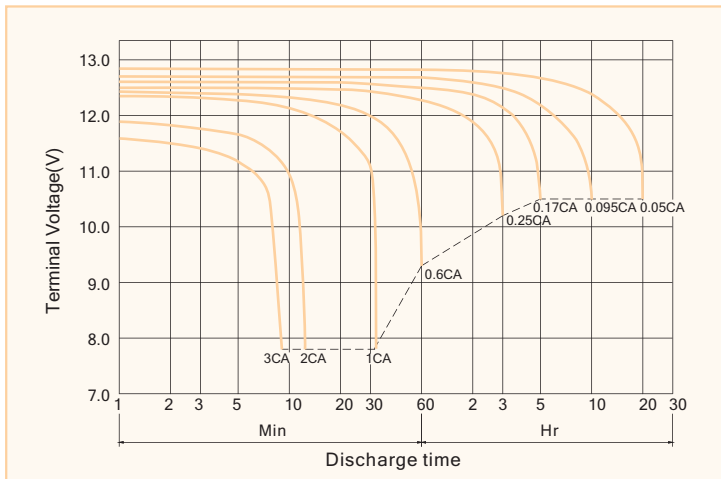
- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

OUTER DIMENSIONS	mm(Inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
		151±1.5(5.94±0.06)	65±1.5(2.56±0.06)	93±1.5(3.66±0.06)	98±2.0(3.86±0.08)

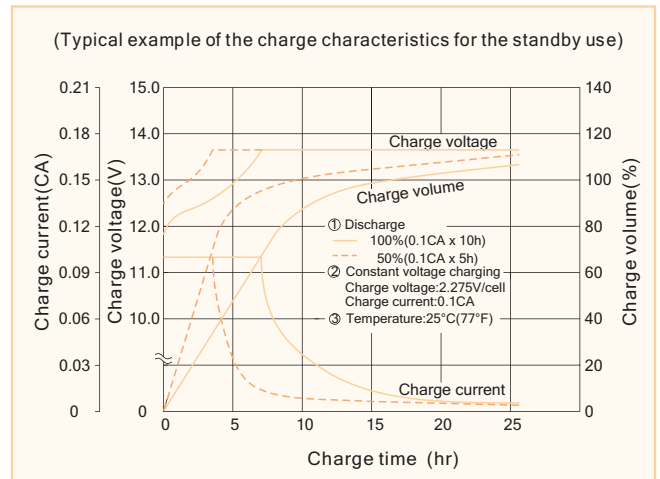
### TERMINAL TYPE

- Terminal T1
- Terminal T2

### BPL7-12 (BPL7-12FR) discharge characteristics (25°C/77°F)



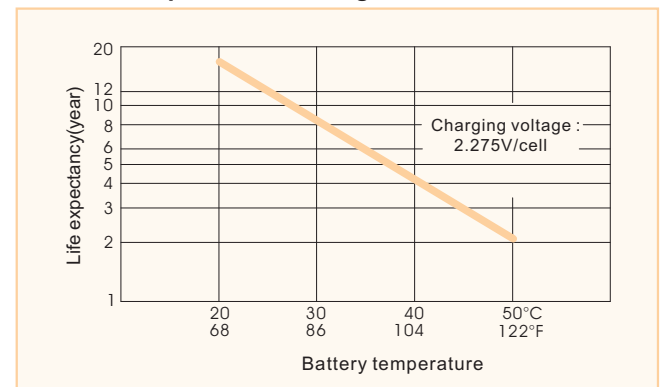
### Battery Charging Characteristics



### Charging Procedure

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.1CA, 25°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~40 (32~104°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

### Effect Of Temperature On Long Term Float Life



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

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	228.0	171.4	138.8	83.50	48.40	20.40	14.10	7.86	4.11
1.75V	264.0	185.7	145.3	86.70	49.80	20.80	14.30	7.98	4.20
1.70V	280.0	192.4	149.7	88.60	50.70	21.00	14.40	8.02	4.22
1.65V	293.0	197.0	153.2	89.90	51.40	21.20	14.50	8.04	4.23
1.60V	302.0	200.9	156.2	90.80	51.90	21.30	14.50	8.04	4.23

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

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	20.54	15.09	12.07	7.076	4.067	1.700	1.175	0.655	0.343
1.75V	24.22	16.35	12.63	7.347	4.185	1.733	1.192	0.665	0.350
1.70V	25.69	16.94	13.02	7.508	4.261	1.750	1.200	0.668	0.352
1.65V	26.88	17.34	13.32	7.619	4.319	1.767	1.208	0.670	0.353
1.60V	27.71	17.68	13.58	7.695	4.361	1.775	1.208	0.670	0.353

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

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