

VRLA Rechargeable Battery

BPS4.5-12 (BPS4.5-12FR)

FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- Absorbent Glass Mat technology for efficient gas recombination

APPLICATION

- UPS
- Toy-Cars
- Fans
- Electronic Doorbells

SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (225mA, 10.5V)	4.50 Ah
	10 Hour Rate (428mA, 10.5V)	4.28 Ah
	5 Hour Rate (765mA, 10.5V)	3.83 Ah
	1 Hour Rate (2700mA, 9.30V)	2.70 Ah
Approx. Weight	1840g(4.06lbs.)	
Terminals	T1 (Faston Tab 187) T2 is optional	
Max. Discharge Current	67.5 A (5 sec.)	
Max. Charge Current	1.35 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	≤42mΩ (Fully Charged)	

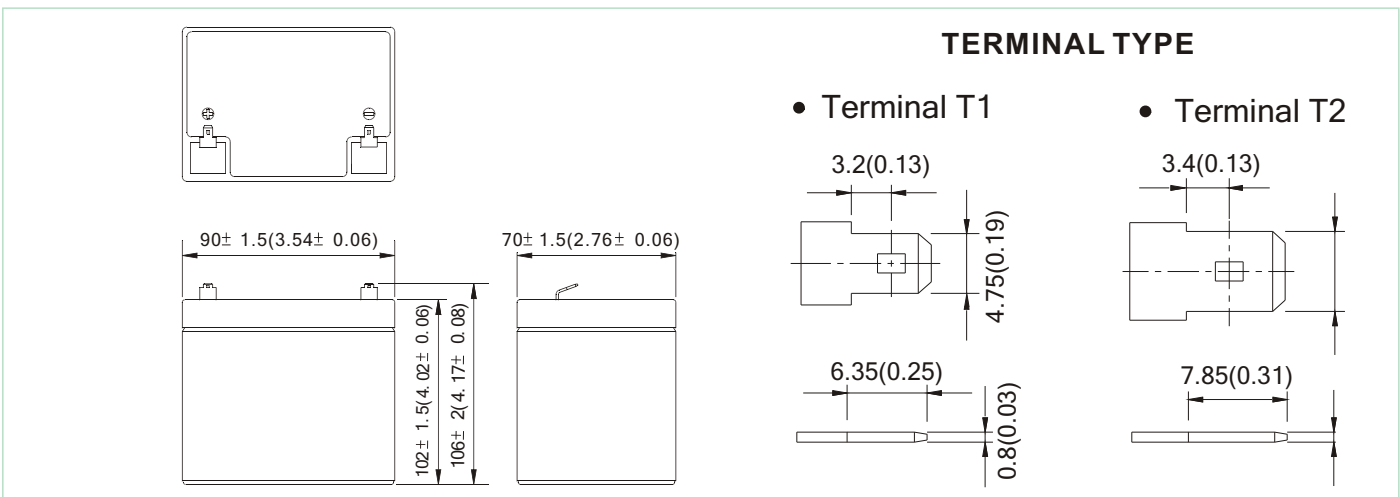


CONTAINER MATERIAL

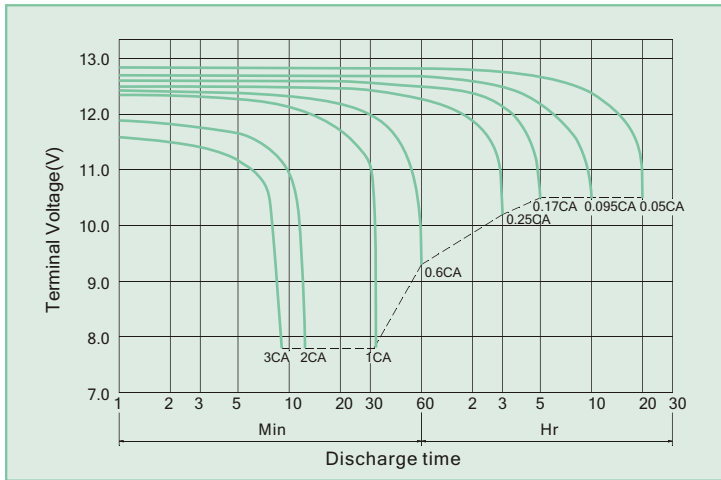
- BPS4.5-12:
ABS: UL 94-HB (Dark gray color)
- BPS4.5-12FR:
ABS: UL 94-V0 (Light gray color)

 ISO 9001	 ISO 14001
 MH19884 UL	 C4M20310-2474-E-16 CE
<ul style="list-style-type: none"> ● IEC61056 ● GB/T 19639 	<ul style="list-style-type: none"> ● JIS C 8702

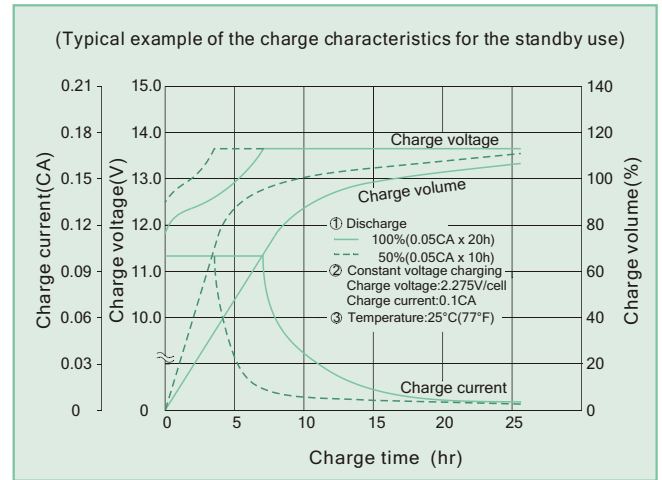
OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	90±1.5(3.54±0.06)	70±1.5(2.76±0.06)	102±1.5(4.02±0.06)	106±2.0(4.17±0.08)



BPS4.5-12 (BPS4.5-12FR) discharge characteristics (25°C /77°F)



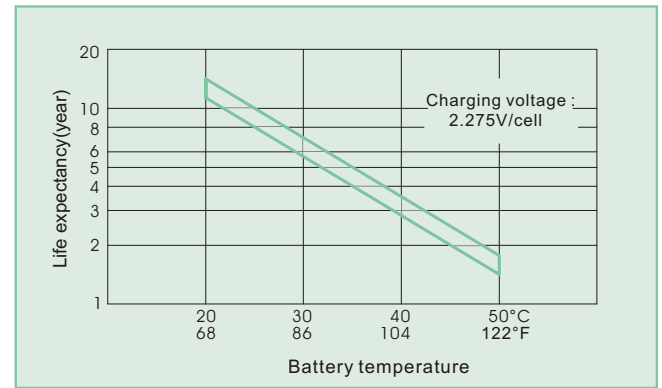
Battery Charging Characteristics



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	162.7	119.8	96.0	57.1	32.75	13.12	9.04	5.054	2.660
1.75V	188.3	129.8	100.4	59.3	33.73	13.38	9.18	5.130	2.700
1.70V	200.1	134.4	103.5	60.6	34.34	13.50	9.23	5.156	2.712
1.65V	209.1	137.6	105.9	61.5	34.75	13.59	9.26	5.171	2.724
1.60V	216.0	140.4	108.0	62.1	35.10	13.68	9.29	5.171	2.724

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	14.66	10.54	8.35	4.84	2.75	1.09	0.754	0.421	0.222
1.75V	17.28	11.42	8.73	5.02	2.83	1.11	0.765	0.427	0.225
1.70V	18.36	11.83	9.00	5.14	2.89	1.12	0.769	0.430	0.226
1.65V	19.18	12.12	9.21	5.21	2.92	1.13	0.772	0.431	0.227
1.60V	19.82	12.36	9.39	5.26	2.95	1.14	0.774	0.431	0.227

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

A/0 REV. Aug. 2009

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