

## VRLA Rechargeable Battery

# SHR3.6-12 (SHR3.6-12FR)

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high rate usage
- Its design life is up to 5 years in floating application
- Absorbent Glass Mat technology for efficient gas recombination
- The power density at 2 min~15min discharging rate is 50% higher than BP series

### APPLICATION

- UPS
- Emergency Lights
- Toy-Cars
- Fishing Lights
- Power Packs

### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	15 Min Rate (13W, 1.60V/Cell)	
Approx. Weight	930g(2.05lbs.)	
Terminals	T2 (Faston Tab 205)	
Max. Discharge Current	45 A (5 sec.)	
Max. Charge Current	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	≤ 27mΩ (Fully Charged)	



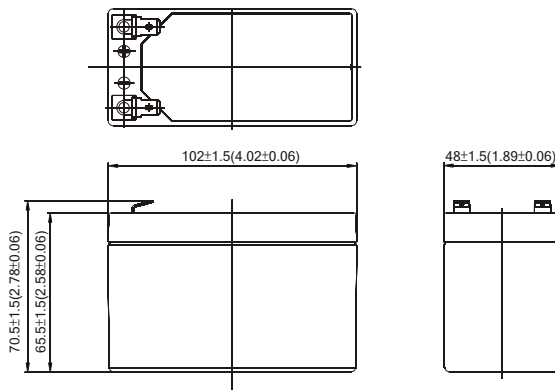
### CONTAINER MATERIAL

- SHR3.6-12:  
ABS: UL 94-HB (Dark gray color)
- SHR3.6-12FR:  
ABS: UL 94-V0 (Light gray color)

 <b>ISO 9001</b>	 <b>ISO14001</b>
 <b>UL</b> MH19884	 <b>CE</b> C4M20310-2474-E-16
<ul style="list-style-type: none"> <li>• IEC61056</li> <li>• GB/T 19639</li> </ul>	<ul style="list-style-type: none"> <li>• JIS C 8702</li> </ul>

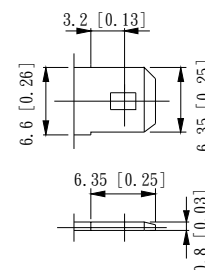
### OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
102±1.5(4.02±0.06)	48±1.5(1.89±0.06)	65.5±1.5(2.58±0.06)	70.5±2.0(2.78±0.08)

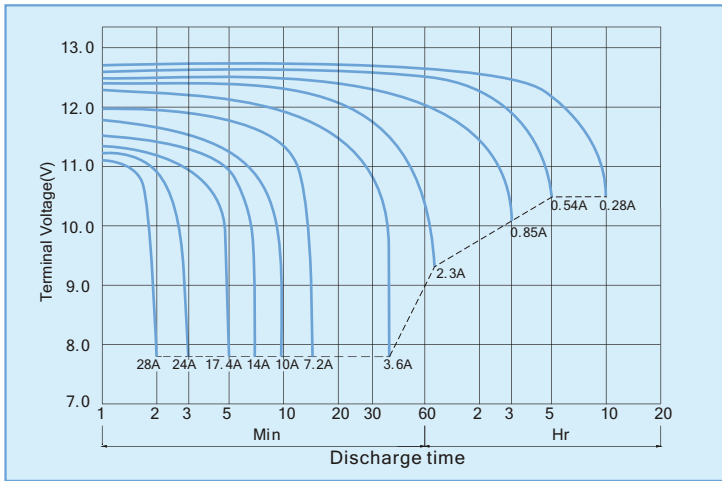


### TERMINAL TYPE

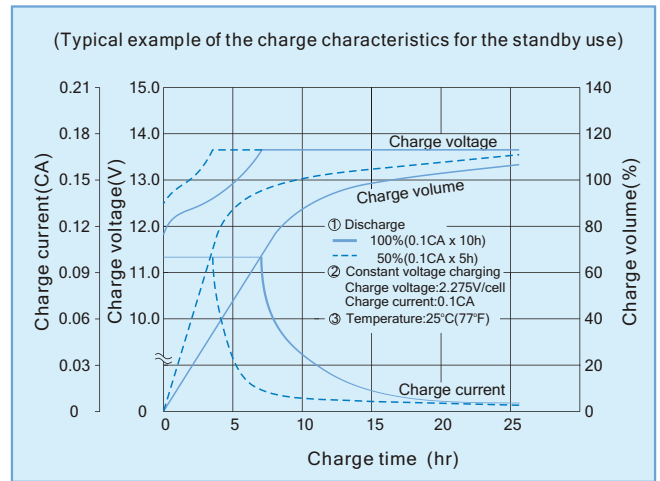
- Terminal T2



**SHR3.6-12 (SHR3.6-12FR) discharge characteristics (25°C/77°F)**



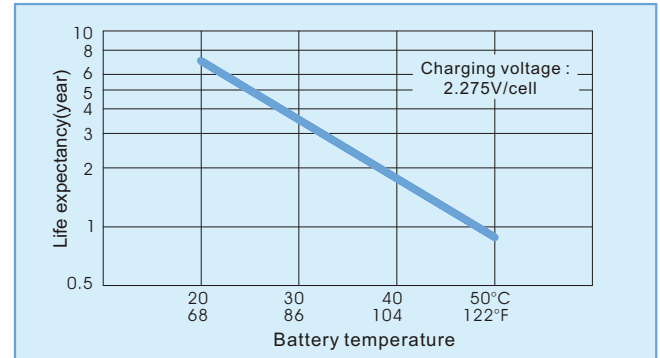
**Battery Charging Characteristics**



**Charging Procedure**

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (A)	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	1	24	20	0~40 (32~104°F)
For cycle service					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	2 Min	3 Min	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	249	210	158	101	75	61	45	34	30	26	14
1.75V	267	225	170	107	77	63	46	35	31	27	14
1.70V	280	236	176	108	78	64	47	36	31	27	14
1.67V	286	243	180	109	78	64	47	36	31	27	15
1.60V	292	250	185	110	78	64	47	37	31	27	15
1.50V	298	255	186	110	78	64	47	37	31	27	15

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

F.V. (V/cell) \ Discharge Time	2 Min	3 Min	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	22.9	19.3	14.2	8.8	6.5	5.2	3.8	3.0	2.5	2.2	1.2
1.75V	24.6	20.8	15.3	9.4	6.7	5.4	3.9	3.1	2.6	2.3	1.2
1.70V	26.0	21.8	15.9	9.6	6.8	5.5	4.0	3.1	2.6	2.3	1.2
1.67V	26.5	22.5	16.6	9.7	6.8	5.5	4.0	3.1	2.6	2.3	1.2
1.60V	27.1	23.1	17.2	9.8	6.8	5.5	4.0	3.1	2.6	2.3	1.2
1.50V	27.7	23.6	17.4	9.8	6.8	5.5	4.0	3.1	2.6	2.3	1.2

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

Trial A/5 REV. Dec. 2010

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