

HR1221W

High Rate Series Batery

General Features



High rate Series VRLA batteries are designed with low internal resistance AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for High rate UPS and power backup system. High rate series Batteries are the special design batteries with 8 years floating design life at 25°C.

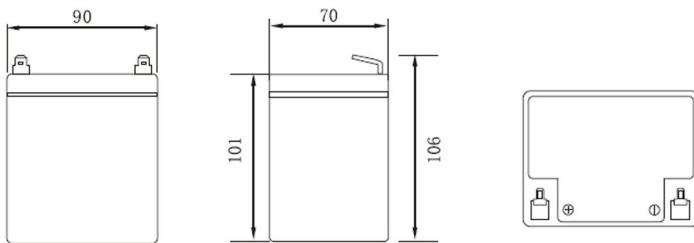
- Safety Sealing
- Non-spillable construction
- High Reliability and Stability
- Sealed and Maintenance-free
- Safety and Quality certification
- Long Life and low self-discharge design
- 30% increased power

Container: ABS(UL94-HB) & Flame Retardant of UL94-V0 can be available upon request

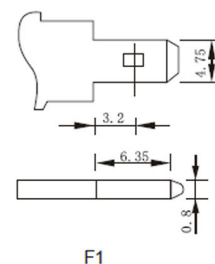
Specification

Batery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		5.0Ah	
	Capacity(15 minutes rate to 1.67V/Cell)		21W	
Dimensions	Lenght	With	Height	Total Height
	90mm (3.54inches)	70mm (2.76inches)	100mm (3.94inches)	106mm (4.17inches)
Aprox Weight	1.5kg (3.309lbs) ± 3%			
Max. discharge current	50 A (5Sec.)			
Internal Resistance	Approx 23.0mΩ			
Capacity affected by Temp. (20HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge at 25°C (77°F)	After 3 month storage		After 6 month storage	After 12 month storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	14.6-14.8V (Initial charging current less than 2.1A)		13.60-13.80V	

Outer Dimensions (mm)



Terminal Type (mm)



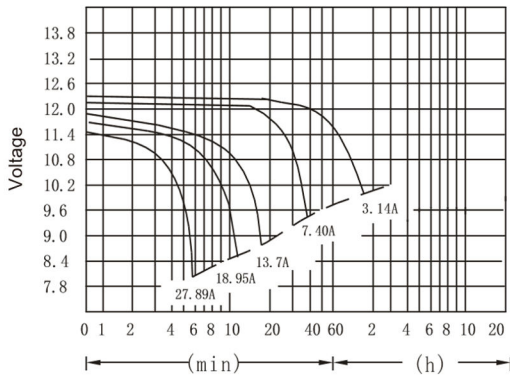
Constant Power(Watt) Discharge at 25°C (77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	60min	90min
1.60V	45.15	41.83	27.81	21.85	17.31	11.81	6.85	4.91
1.67V	42.87	39.51	26.33	21.00	16.75	11.35	6.67	4.75
1.70V	41.17	37.67	25.45	20.35	16.30	11.21	6.48	4.67
1.75V	39.36	35.58	24.61	19.81	15.71	10.82	6.31	4.55
1.80V	37.69	32.35	22.87	18.75	14.83	10.41	6.15	4.43
1.85V	32.17	28.57	20.15	16.11	12.78	9.42	5.58	4.05

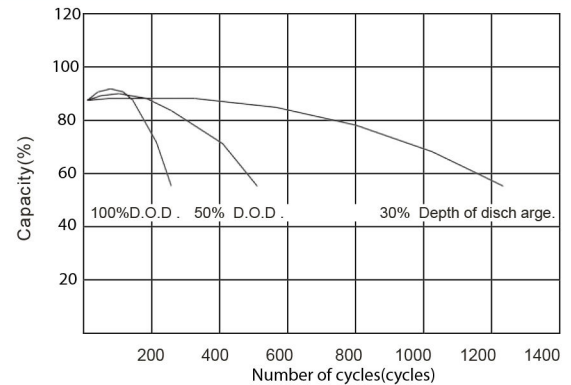
Constant Current(Amp) Discharge at 25°C (77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	60min	90min
1.60V	26.11	22.88	14.31	11.15	8.70	5.95	3.59	2.58
1.67V	23.75	21.15	13.52	10.71	8.37	5.77	3.51	2.48
1.70V	22.68	20.87	13.07	10.37	8.22	5.69	3.46	2.44
1.75V	21.08	19.07	12.68	10.08	7.94	5.51	3.38	2.35
1.80V	19.33	17.11	12.05	9.65	7.50	5.30	3.27	2.28
1.85V	16.50	14.78	10.40	8.11	6.59	4.87	2.86	2.11

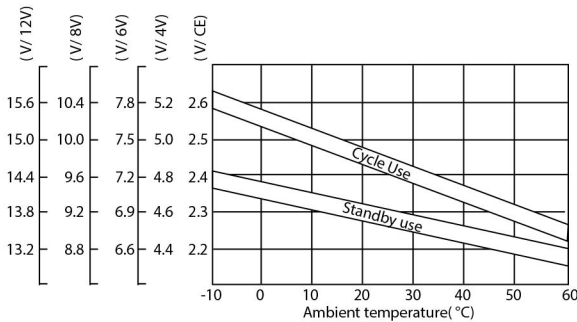
Discharge characteristic Curve



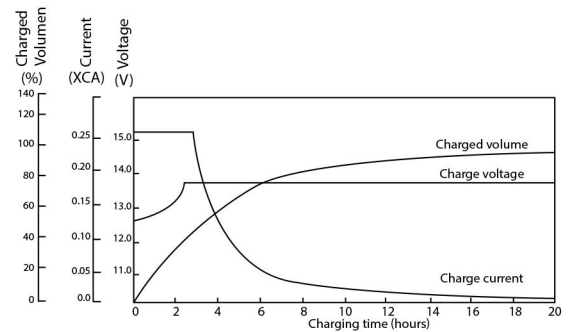
Cycle service life in relation to depth of discharge



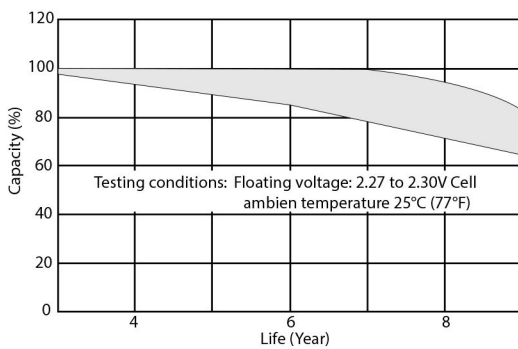
Relationship between charging voltage and temperature



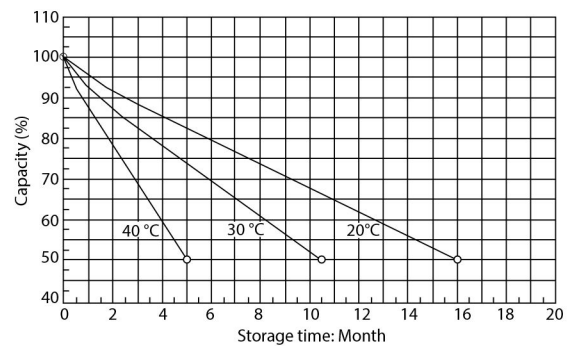
Constant voltage charging characteristic (0.25CA, at 25°C)



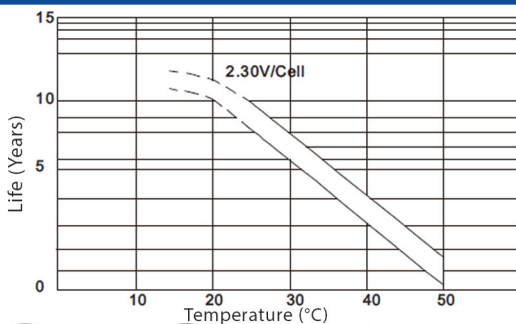
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

