

High Rate Series Battery

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 5 years floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.

Application

- *Emergency Power System
- *Communication equipment
- *Telecommunication systems
- *Uninterruptible power supplies
- *Power tools
- *Alarm system
- *Security system
- *Fire and Security System. etc.

General Features

- *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 output at 15M backup time.

Construction

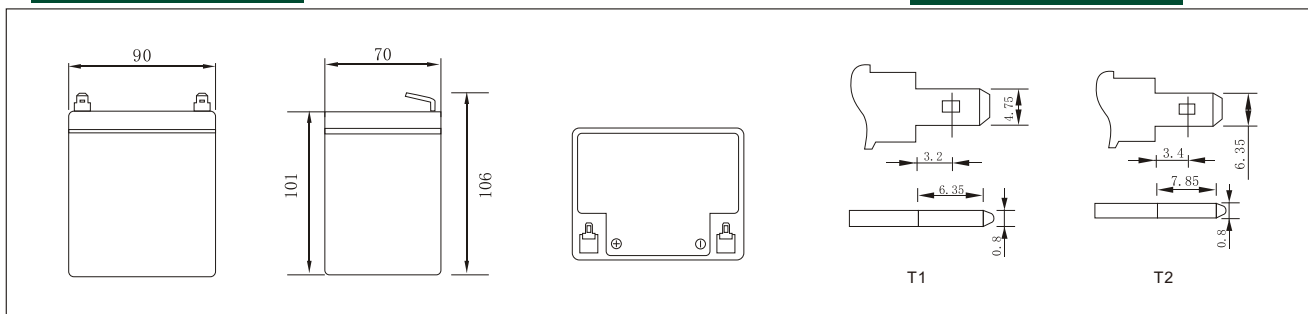
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid
- *SeparatorFiber glass
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V0 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper



Specification

Battery Model	Nominal Voltage			12V
	Capacity(15 minutes rate to 1.67V/Cell)			21W
	Rated capacity(20 Hour rate)			5Ah
Dimensions	Length	Width	Height	Total Height
	90mm (3.54 inches)	70mm(2.76 inches)	100mm(3.94 inches)	106mm (4.17 inches)
Approx Weight	1.5kg(3.309lbs) ±3%			
Capacity 25°C (77°F)	30 Min rate(1.70V)		15 Min rate(1.67V)	5 Min rate(1.6V)
	11.21W/cell		21W/cell	41.85W/cell
Max. discharge current	50A (5Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 30mO			
Capacity affected by Temp. (20 HR)	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 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	14.60-14.80V (Initial charging current less than 1.5A)		13.60-13.80V	

Outer dimensions (mm)

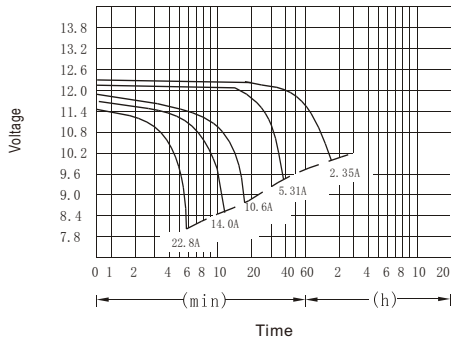


Terminal Type (mm)

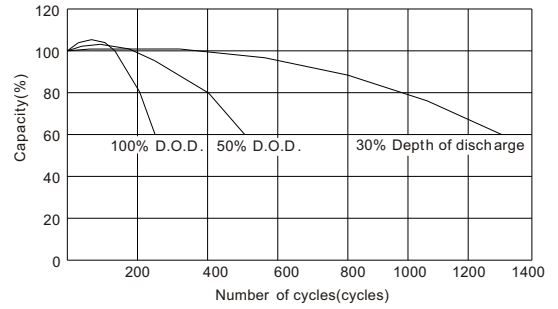
Constant Power(Watt) Discharge at 25°C (77°F)									
F.V/Time	3min	5min	10min	15min	20min	30min	60min	90min	
1.60V	45.15	41.83	27.81	21.85	17.31	11.81	6.85	4.91	
1.67V	42.87	39.51	26.33	21.00	16.75	11.35	6.67	4.75	
1.70V	41.17	37.67	25.45	20.35	16.30	11.21	6.48	4.67	
1.75V	39.36	35.58	24.61	19.81	15.71	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	

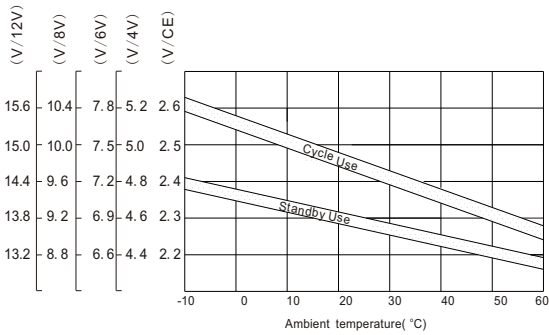
Discharge characteristic Curve



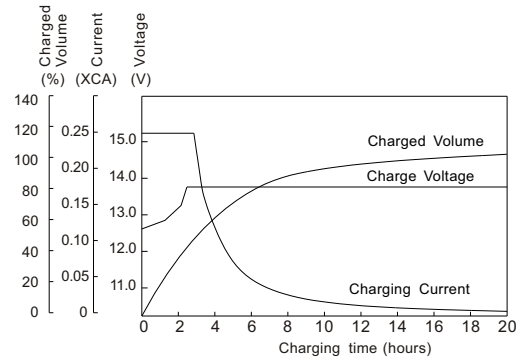
Cycle service life in relation to depth of discharge



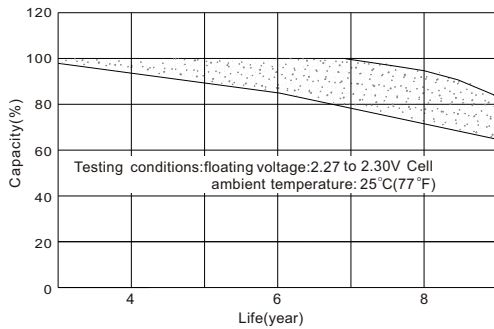
Relationship between charging voltage and temperature



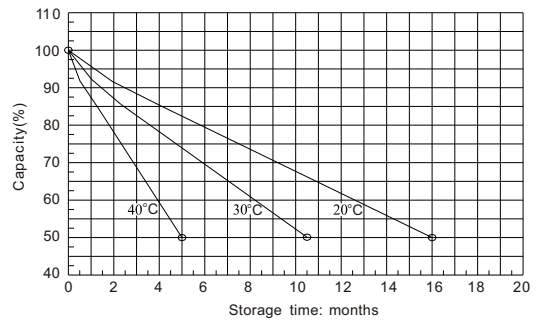
Constant voltage charging characteristic (0.25CA, at 25°C)



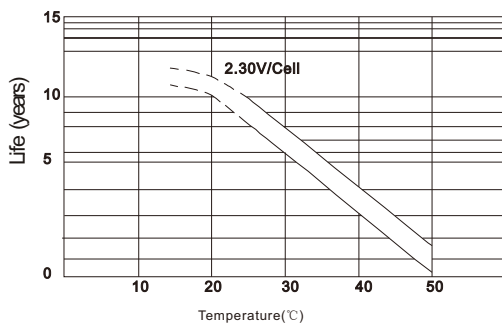
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

