

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 8 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

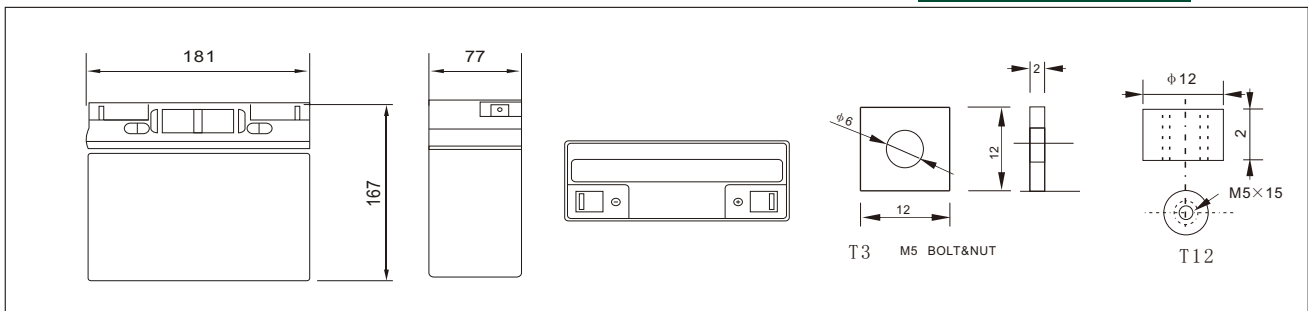
- *PositiveLead dioxide
- *ElectrolyteSulfuric acid
- *SeparatorFiber glass
- *ContainerABS(UL94-HB), Flammability Resistance of UL94-V0 can be available upon request
- *NegativeLead
- *Safety ValveEPDR
- *TerminalCopper

Specification

Battery Model	Nominal Voltage			12V
	Capacity(15 minutes rate to 1.67V/Cell)			68W
	Rated capacity(20 Hour rate)			20Ah
Dimensions	Length	Width	Height	Total Height
	181mm (7.13 inches)	77mm(3.03 inches)	167mm(6.57 inches)	167mm (6.57 inches)
Approx Weight	5.3kg(11.69lbs) ±3%			
Capacity 25°C (77°F)	60 Min rate(1.75V)	30 Min rate(1.7V)	15 Min rate(1.67V)	5 Min rate(1.6V)
	21.35W/cell	38.35W/cell	68.0W/cell	130.3W/cell
Max.discharge current	180A(5Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 10mO			
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 6.0A)			13.70-13.90V

Outer dimensions (mm)

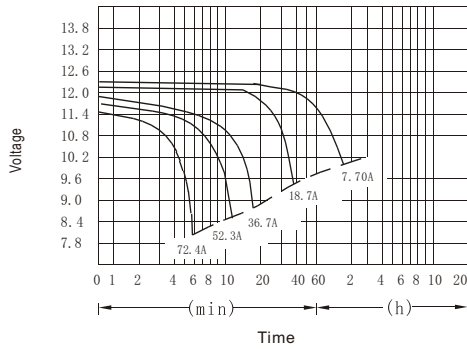
Terminal Type (mm)



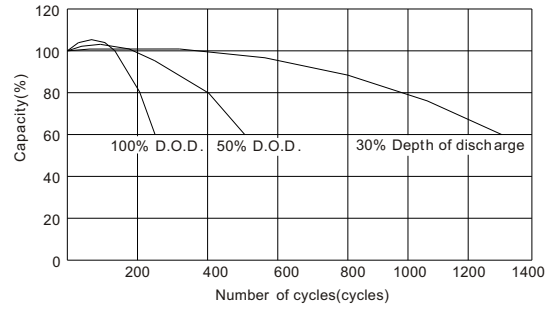
Constant Power(Watt) Discharge at 25°C (77°F)								
F.V/Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	129.8	106.5	94.74	71.89	56.87	40.68	23.11	16.54
1.67V	119.6	98.9	88.62	68.07	54.31	39.27	22.29	15.96
1.70V	114.9	95.65	85.89	66.55	53.22	38.35	21.89	15.74
1.75V	107.9	90.07	81.65	63.38	51.17	37.09	21.31	15.26
1.80V	100.1	84.33	76.89	60.59	49.09	35.87	20.74	14.87
1.85V	87.3	72.91	66.15	52.77	43.07	31.98	18.83	13.68

Constant Current(Amp) Discharge at 25°C (77°F)								
F.V/Time	5min	8min	10min	15min	20min	30min	60min	90min
1.60V	72.45	59.08	52.25	39.3	30.89	21.87	12.31	8.77
1.67V	65.81	53.87	48.31	36.79	29.1	20.79	11.8	8.34
1.70V	62.82	51.85	46.42	35.55	28.31	20.24	11.55	8.21
1.75V	0.16	48.15	43.51	33.64	26.94	19.37	11.16	7.96
1.80V	53.32	44.67	40.58	31.89	25.64	18.49	10.75	7.68
1.85V	45.58	38.09	34.41	27.55	22.26	16.44	9.67	7.05

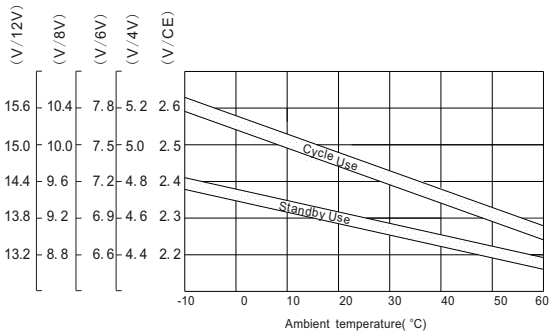
Discharge characteristic Curve



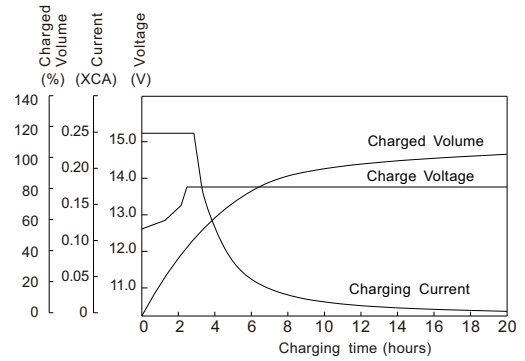
Cycle service life in relation to depth of discharge



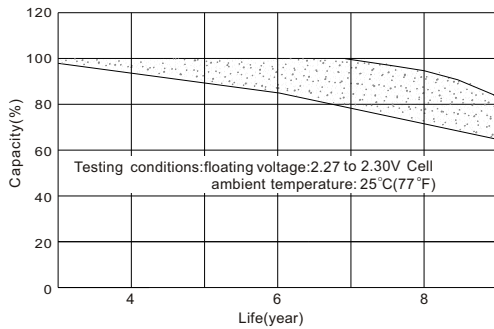
Relationship between charging voltage and temperature



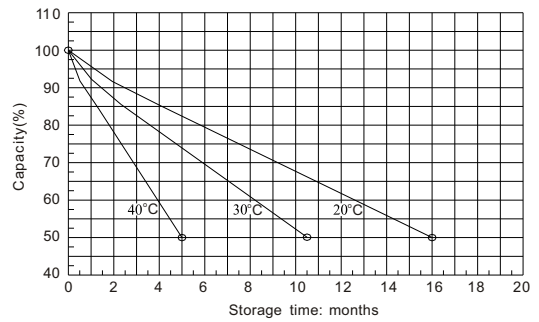
Constant voltage charging characteristic (0.25CA, at 25°C)



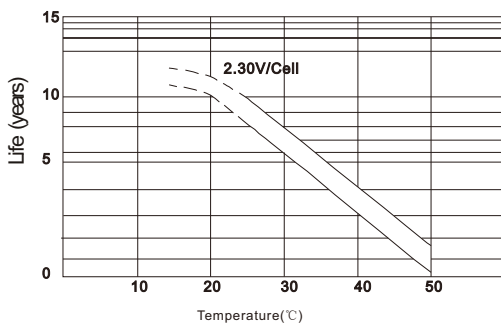
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

