

Gel Series SLA Battery

Gel Series

Gel series batteries are designed to meet the requirements of frequent cyclic and high temperature applications such as broadband, PVs etc through up-to-date gel technologies. BOSFA Gel batteries uses German origin high purity fumed silica to form sulfuric acid thixotropic Gel and fills to the batteries with vacuum to ensure the fully penetration of electrolyte through separators and plates pastes.

Application

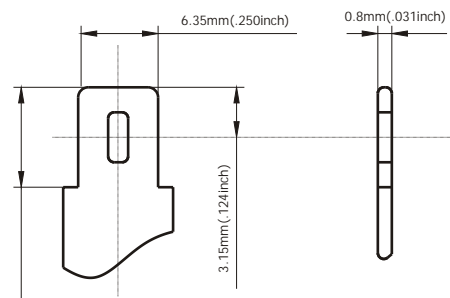
- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- UPS
- Power tools
- Emergency Power System
- Toys

General Features

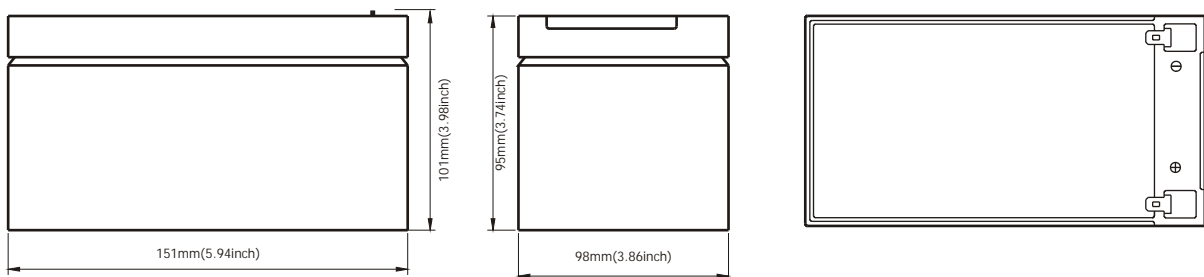
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

Construction

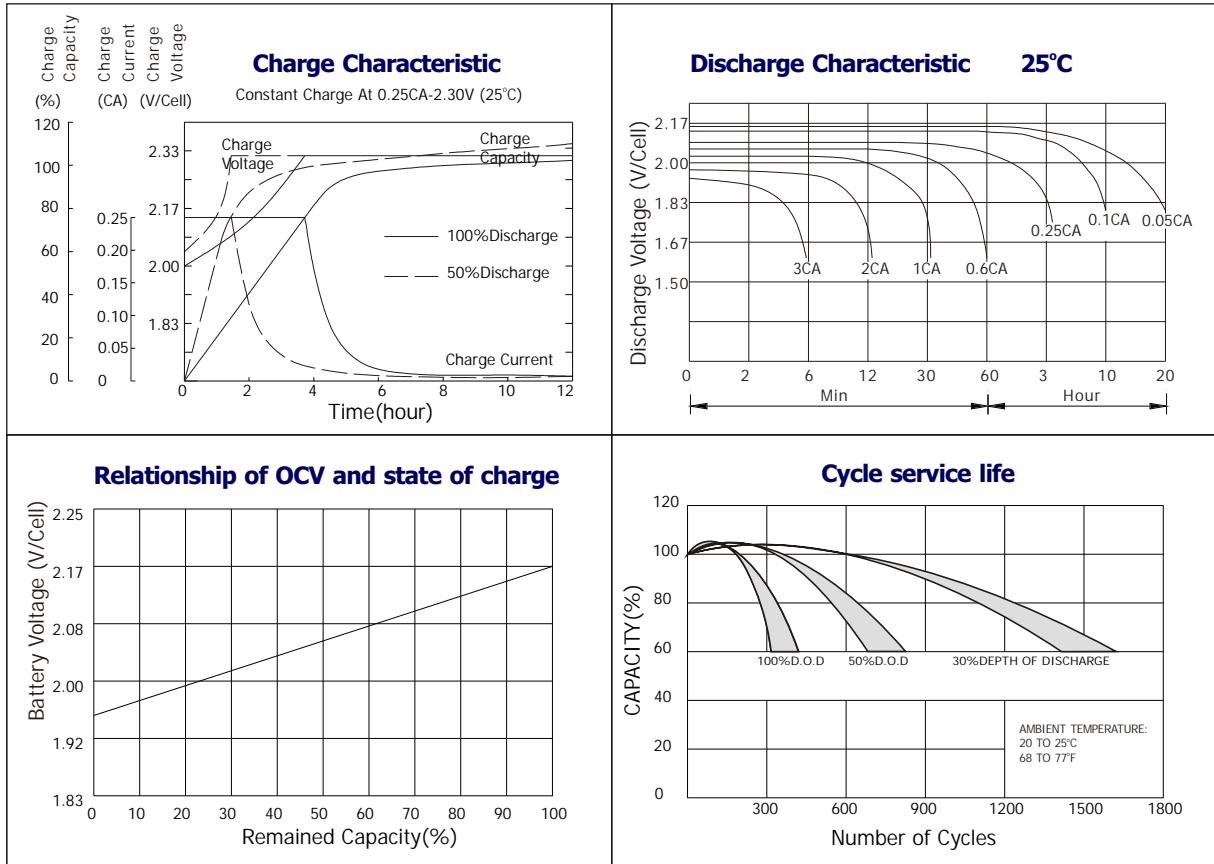
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|-----------|-------------------|--------------|------------------------------------|
| Component |Raw material | Sealant |Epoxy Resin |
| Positive |Lead dioxide | Safety valve |EPDR |
| Negative |Lead | Terminal |Copper |
| Container |ABS | Separator |Macromolecule polymer |
| Cover |ABS | Electrolyte |sulfuric acid thixotropic Gel |



Terminal Dimensions



Battery Model	GEL12-12			
Designed Life	8 Years (Floating) or > 750 Cycles @ 50% D.O.D			
Capacity(25°C)	20HR(0.6A, 1.75V)	10HR(0.115A, 1.75V)	5HR(2.04A, 1.75V)	1HR(7.8A, 1.75V)
	12AH	11.5AH	10.2AH	7.8AH
Dimensions	Length	Width	Height	Total Height
	151mm(5.94inch)	98mm(3.86inch)	95mm(3.74inch)	101mm(3.98inch)
Approx. Weight	4Kg (8.82 lbs)			
Internal Resistance	Full charged at 25°C: 0.02 Ohm			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-15V(-30mV/ °C), max. Current: 3.6A		13.6-13.8V(-20mV/ °C)	



Constant current discharge ratings-amperes at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	46.9	29.2	22.0	13.4	8.54	3.75	2.29	1.28	0.67
1.67V	44.0	27.7	21.2	12.8	8.42	3.60	2.24	1.27	0.65
1.70V	40.4	26.7	20.7	11.7	8.17	3.36	2.19	1.26	0.64
1.75V	39.6	25.9	20.0	11.1	7.78	3.25	2.15	1.25	0.62
1.80V	35.4	24.7	18.2	10.3	7.29	3.12	2.02	1.23	0.61
1.85V	31.2	23.5	16.3	9.46	6.79	3.01	1.89	1.21	0.59

Constant power discharge ratings-watts at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	82.3	52.7	40.2	24.2	15.4	6.65	3.87	2.56	1.35
1.67V	79.4	51.4	39.7	23.7	15.3	6.44	3.85	2.55	1.30
1.70V	74.8	50.9	39.4	22.2	15.0	6.15	3.80	2.53	1.28
1.75V	75.3	50.7	39.0	21.5	14.8	6.01	3.77	2.50	1.25
1.80V	68.9	50.0	36.2	20.5	13.9	5.83	3.65	2.47	1.22
1.85V	62.5	47.4	32.8	19.2	13.1	5.65	3.54	2.43	1.17

