

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

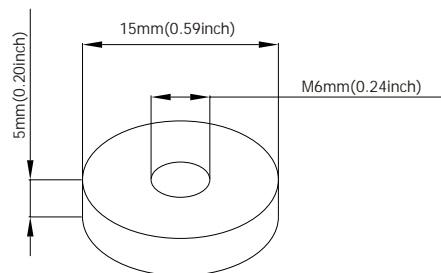
- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- UPS
- Power tools
- Emergency Power System
- Toys

General Features

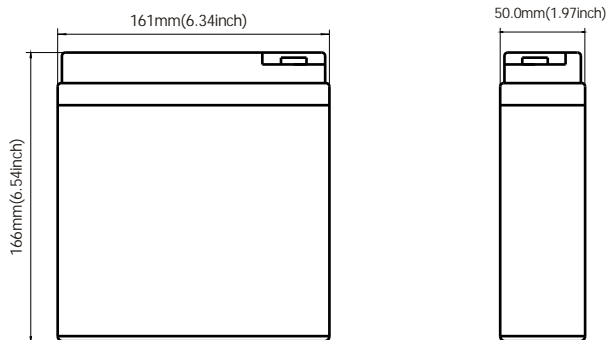
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.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

Construction

- | | | | |
|-----------|-------------------|--------------|------------------------------------|
| 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 |

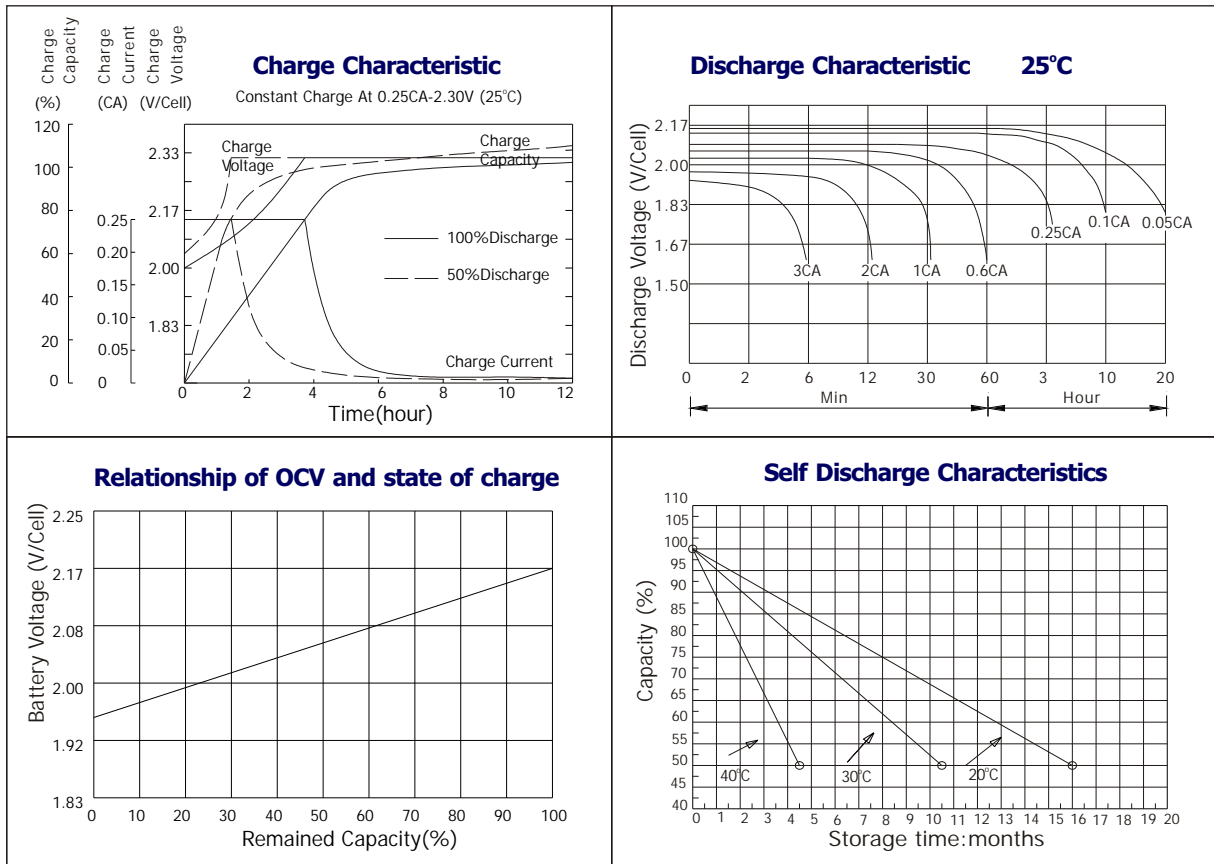


Terminal Dimensions



Battery Model	GEL2-50			
Designed Life	12 Years (Floating) or > 750 Cycles @ 50% D.O.D			
Capacity(25°C)	20HR(2.55A,1.75V)	10HR(5A,1.75V)	5HR(8.5A,1.75V)	1HR(30A,1.75V)
	51AH	50AH	42.5AH	30AH
Dimensions	Length	Width	Height	Total Height
	161mm(6.34inch)	50mm(1.97inch)	166mm(6.54inch)	166mm(6.54inch)
Approx. Weight	3Kg (6.62 lbs)			
Internal Resistance	Full charged at 25°C: 0.0012 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	
	2.4-2.5V(-5mV/ °C), max. Current: 12.5A		2.27-2.3V(-3mV/ °C)	

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Constant current discharge ratings-amperes at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	195	122	92	56	35.5	15.6	9.5	5.33	2.81
1.67V	183	115	88	53	35.1	15.0	9.3	5.28	2.71
1.70V	168	111	86	49	34.0	14.0	9.1	5.26	2.67
1.75V	165	108	83	46	32.4	13.5	8.9	5.19	2.60
1.80V	147	103	76	43	30.3	13.0	8.4	5.12	2.53
1.85V	130	98	68	39	28.3	12.5	7.9	5.05	2.45

Constant power discharge ratings-watts at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	343	219	167	101	64.1	27.7	16.1	10.67	5.60
1.67V	331	214	165	99	63.7	26.8	16.0	10.60	5.40
1.70V	311	212	164	92	62.5	25.6	15.8	10.53	5.33
1.75V	313	211	163	90	61.5	25.0	15.7	10.40	5.20
1.80V	287	208	151	85	57.9	24.3	15.2	10.27	5.07
1.85V	260	197	137	80	54.5	23.5	14.7	10.13	4.87

