

**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**

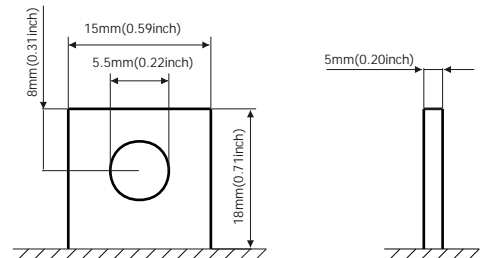
- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- UPS
- Power tools
- Emergency Power System
- Toys

**General Features**

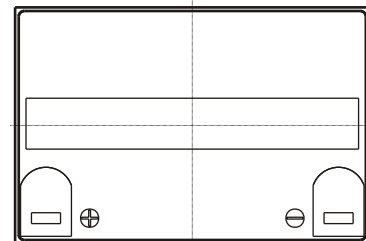
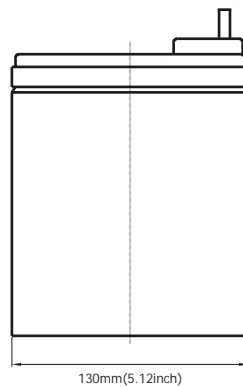
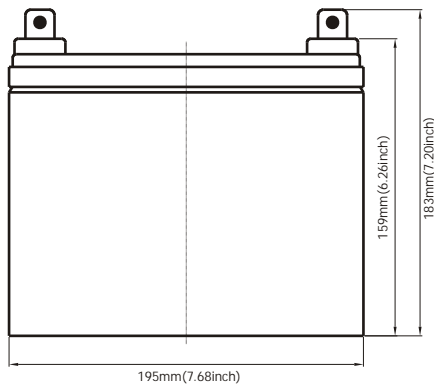
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.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

**Construction**

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

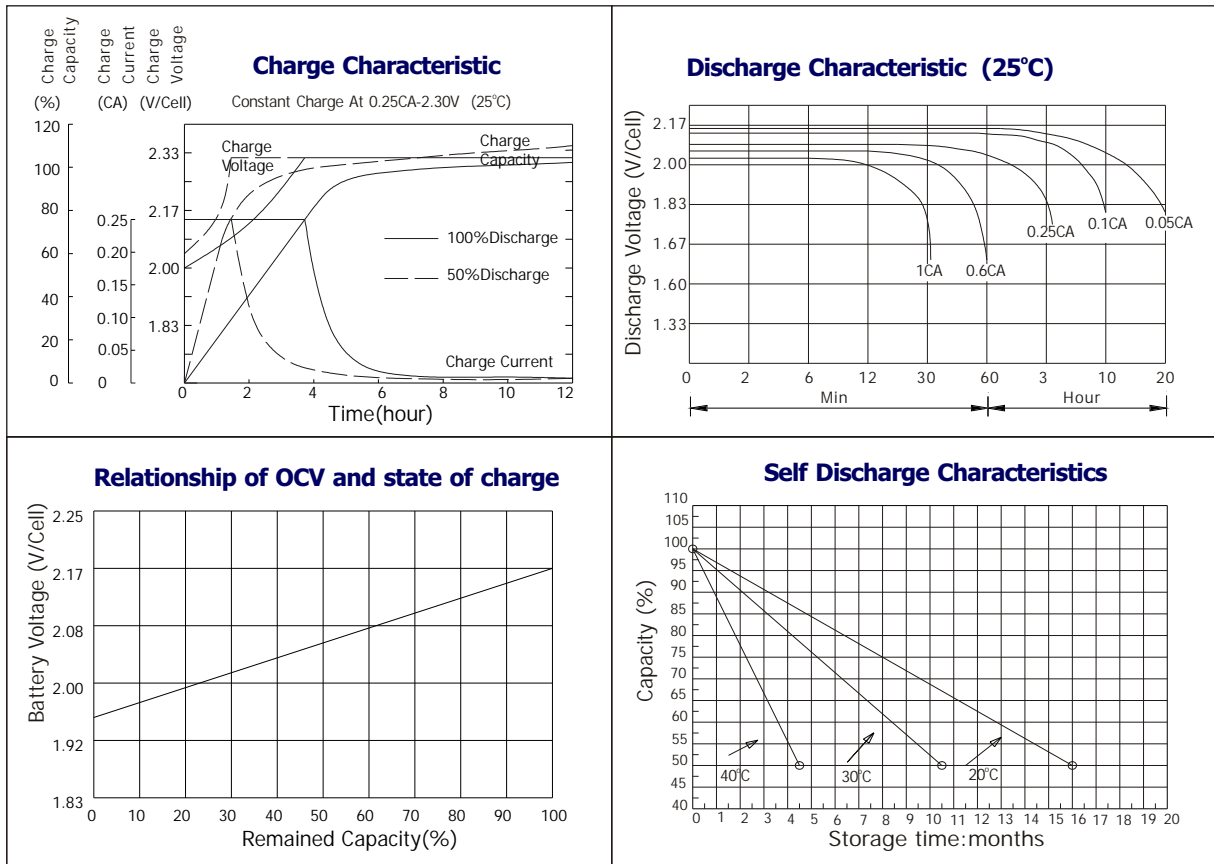


**Terminal Dimensions**



Battery Model	GEL12-30			
Designed Life	10 Years (Floating) or > 750 Cycles @ 50% D.O.D			
Capacity(25°C)	20HR(1.575A,1.75V)	10HR(3A,1.75V)	5HR(5.1A,1.75V)	1HR(18A,1.75V)
	31.5AH	30AH	25.5AH	18AH
Dimensions	Length	Width	Height	Total Height
	195mm(7.68inch)	130mm(5.16inch)	159mm(6.26inch)	183mm(7.2inch)
Approx. Weight	9Kg (19.85 lbs)			
Internal Resistance	Full charged at 25°C: 0.01 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: 7.5A		13.6-13.8V(-20mV/ °C)	

**Gel Series SLA Battery**



**Constant current discharge ratings-amperes at 25°C**

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	105	72.0	52.5	31.5	19.8	8.19	5.72	3.18	1.58
1.67V	95	65.7	51.0	30.6	19.8	8.16	5.68	3.13	1.58
1.70V	89.7	63.3	49.2	30.0	19.7	8.16	5.68	3.11	1.58
1.75V	79.8	58.5	46.5	29.4	19.5	8.10	5.63	3.06	1.57
1.80V	72.0	54.3	44.4	28.5	19.3	8.07	5.58	3.00	1.51
1.85V	54.6	44.7	38.4	26.2	19.1	8.04	5.54	2.95	1.49

**Constant power discharge ratings-watts at 25°C**

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	173	119	93	59.4	39.0	15.7	11.0	6.36	3.16
1.67V	164	118	92	58.2	37.7	15.7	11.0	6.27	3.15
1.70V	153	115	90.6	56.7	36.7	15.7	11.0	6.22	3.15
1.75V	143	107	85.2	55.2	36.4	15.5	10.8	6.11	3.14
1.80V	128	100	80.1	53.7	35.8	15.3	10.7	6.01	3.03
1.85V	103	82.8	69.9	49.2	35.4	15.2	10.5	5.90	2.97

