

**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**

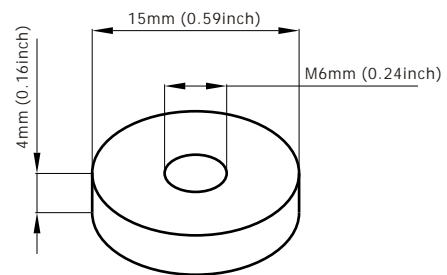
- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- UPS
- Power tools
- Emergency Power System
- Toys

**General Features**

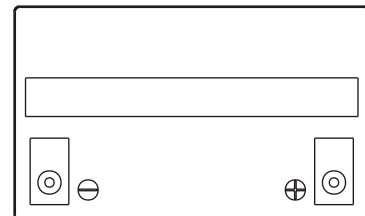
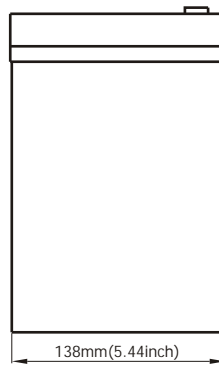
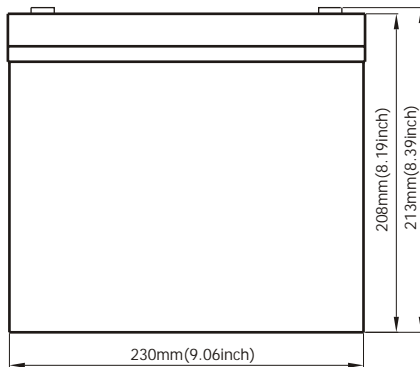
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.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

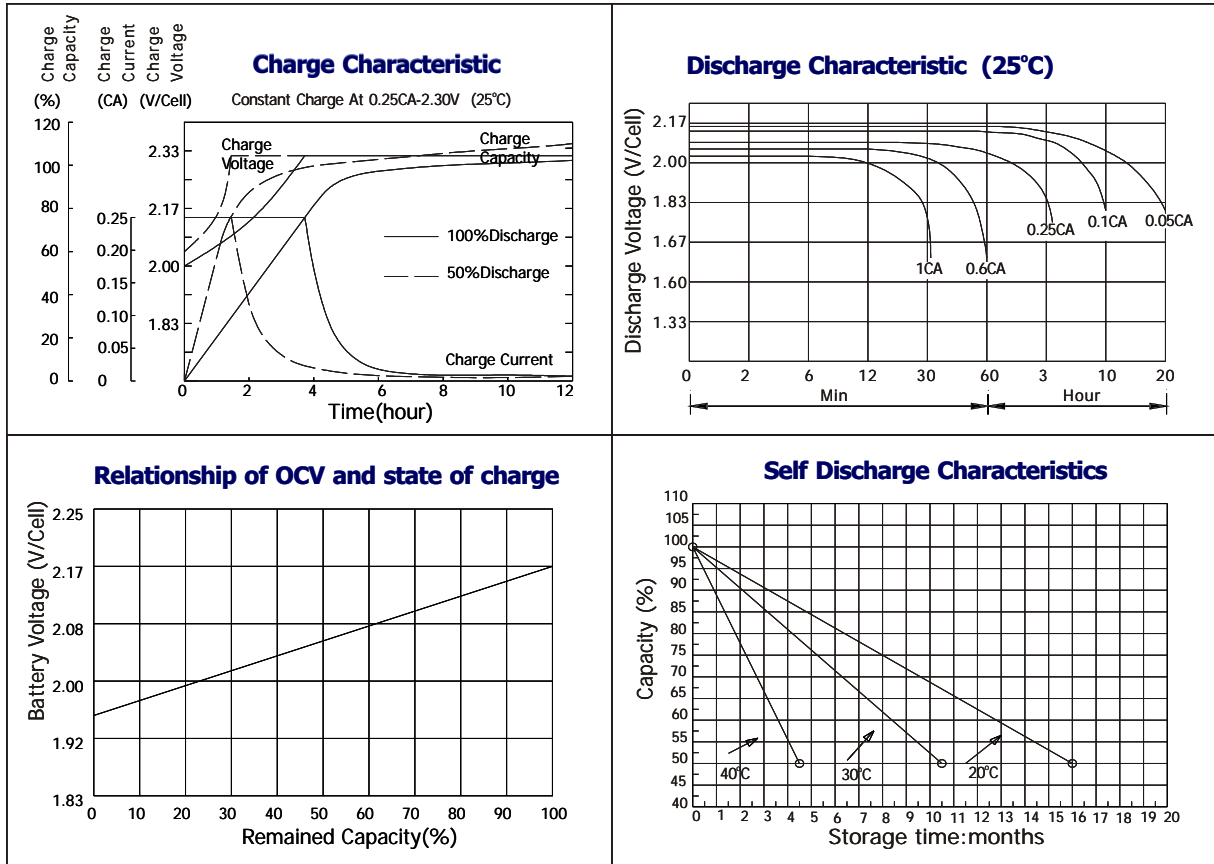


**Terminal Dimensions**



Battery Model	GEL12-55			
Designed Life	10 Years (Floating) or > 750 Cycles @ 50% D.O.D			
Capacity(25°C)	20HR(2.85A,1.75V)	10HR(5.5A,1.75V)	5HR(9A,1.75V)	1HR(33A,1.75V)
	57AH	55AH	45AH	33AH
Dimensions	Length	Width	Height	Total Height
	230mm(9.06inch)	138mm(5.44inch)	208mm(8.19inch)	213mm(8.39inch)
Approx. Weight	17.3Kg (38.15 lbs)			
Internal Resistance	Full charged at 25°C: 0.006 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: 13.75A		13.6-13.8V(-20mV/ °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	193	132	96.3	57.8	36.3	15.0	10.5	5.83	2.90
1.67V	173	120	93.5	56.1	36.2	15.0	10.4	5.74	2.89
1.70V	164	116	90.2	55.0	36.1	15.0	10.4	5.70	2.89
1.75V	146	107	85.3	53.9	35.8	14.9	10.3	5.60	2.88
1.80V	132	100	81.4	52.3	35.3	14.8	10.2	5.50	2.77
1.85V	100	82.0	70.4	48.1	34.9	14.7	10.2	5.41	2.73

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

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	317	219	171	109	71.5	28.8	20.1	11.7	5.80
1.67V	301	216	169	107	69.1	28.8	20.1	11.5	5.78
1.70V	281	211	166	104	67.3	28.8	20.1	11.4	5.78
1.75V	262	197	156	101	66.7	28.4	19.9	11.2	5.75
1.80V	235	183	147	98.5	65.6	28.0	19.5	11.0	5.55
1.85V	188	152	128	90.2	65.0	27.9	19.3	10.8	5.45

