

### GEL Series Battery

GE series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.  
 GE series Batteries are designed for 12 years life time floating design life at 25 °C .  
 Meet with IEC, BS, JIS and Eurobat standard .



### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.
- \* Power tools
- \* Golf cars and buggies
- \* Marine equipment
- \* Medical equipment
- \* Solar and wind power system

### 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

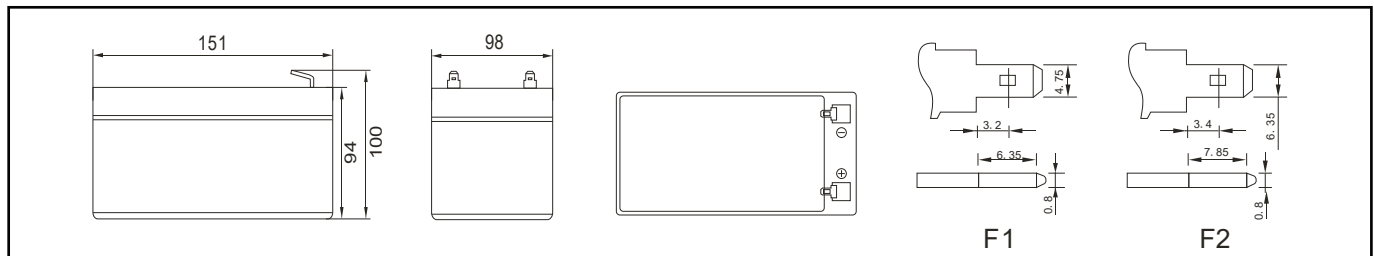
### Construction

- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Silicon dioxide
- \* Separator ..... AGM
- \* Container ..... ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

### Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		14Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	152mm (5.98 inches)	99mm (3.89 inches)	95mm (3.74 inches)	100mm (3.94 inches)
Approx Weight	3.52kg (7.80lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.70A,10.5V)	10 hour rate(1.24A,10.8V)	5 hour rate(2.45A,10.5V)	1 hour rate(7.89A,9.6V)
	14Ah	12.4Ah	12.25Ah	7.89Ah
Max.discharge current	180A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 16mΩ			
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 @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	
	14.4-14.7V (Initial charging current less than 4.2A)		13.50-13.80V	

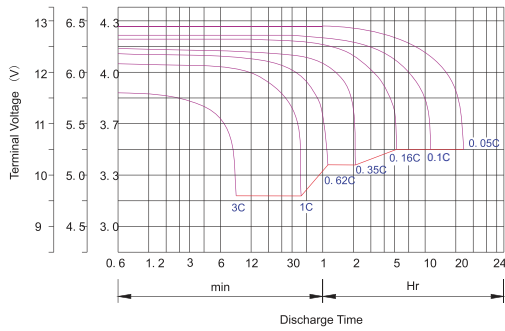
### Outer dimension (mm)



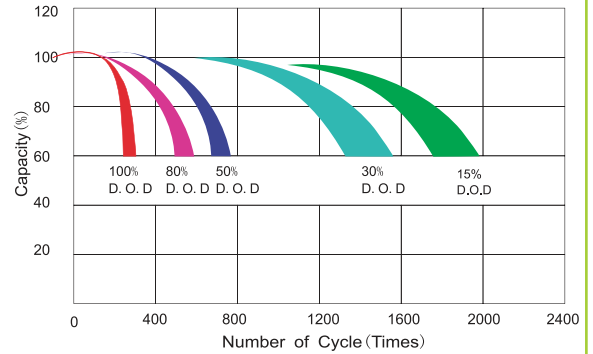
### Terminal Type (mm)

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)												
F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	53.200	36.132	27.330	14.100	7.890	5.775	5.097	3.631	2.478	1.605	1.307	0.734
	98.396	68.976	52.747	28.087	15.741	11.530	10.198	7.265	4.958	3.212	2.616	1.469
1.67V	47.230	33.719	25.910	13.799	7.833	5.717	5.072	3.612	2.464	1.592	1.287	0.697
	87.340	64.362	50.046	27.501	15.628	11.419	10.156	7.240	4.939	3.192	2.581	1.398
1.70V	44.709	32.512	25.271	13.678	7.776	5.712	5.059	3.603	2.464	1.576	1.271	0.679
	82.697	62.098	48.850	27.262	15.532	11.412	10.135	7.223	4.939	3.161	2.549	1.362
1.75V	40.464	30.595	24.207	13.437	7.661	5.637	5.027	3.580	2.451	1.572	1.260	0.700
	74.847	58.450	46.840	26.801	15.342	11.275	10.070	7.181	4.916	3.155	2.529	1.341
1.80V	36.152	28.537	23.213	13.136	7.604	5.597	4.995	3.561	2.444	1.558	1.240	0.646
	66.887	54.538	44.986	26.212	15.246	11.223	10.008	7.147	4.904	3.130	2.491	1.298
1.85V	31.840	26.478	22.006	12.774	7.490	5.534	4.951	3.529	2.430	1.538	1.219	0.624
	58.927	50.625	42.692	25.509	15.039	11.124	9.923	7.090	4.882	3.092	2.452	1.255

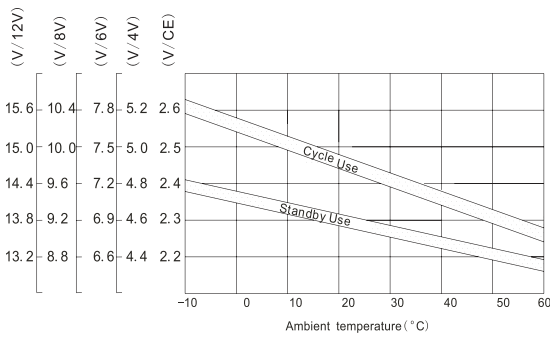
Discharge characteristic Curve



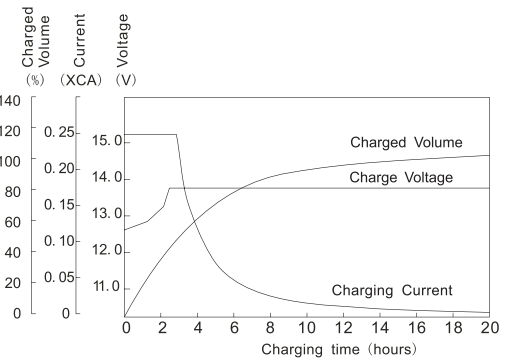
Cycle service life in relation to depth of discharge



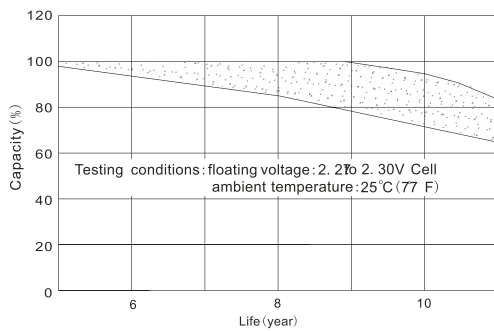
Relationship between charging voltage and temperature



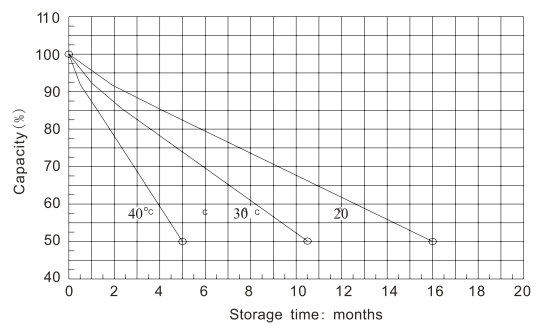
Constant voltage charging characteristic (0.25CA, at 25°C)



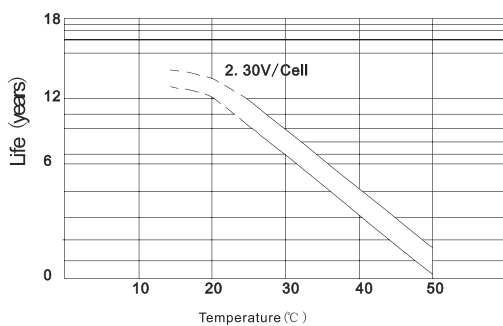
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

