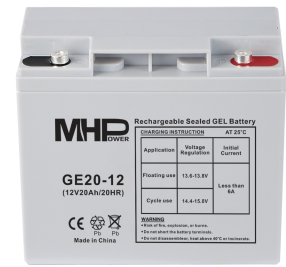


## GEL Series Battery

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

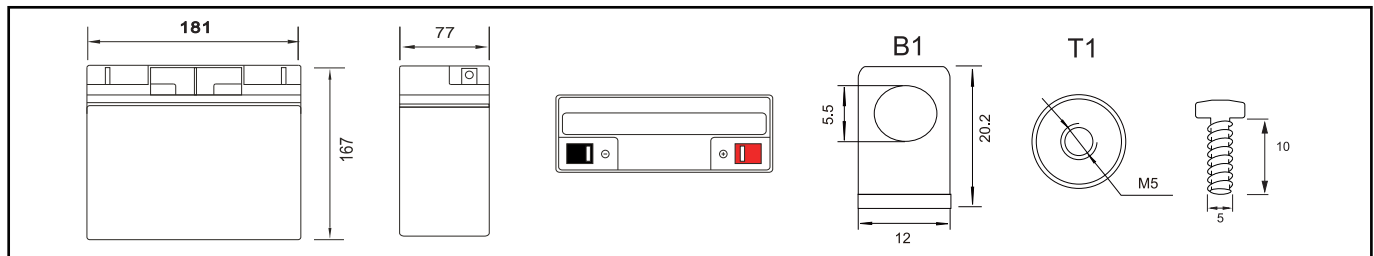
## Construction

- \* 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)		20Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	181mm (7.12 inches)	77mm (3.03 inches)	158mm (6.22 inches)	167mm (6.57 inches)
Approx Weight	5.30kg (11.68lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(1.02A,10.5V)	10 hour rate(1.91A,10.8V)	5 hour rate(3.58A,10.5V)	1 hour rate(12.60A,9.6V)
	20.4Ah	19.1Ah	17.9Ah	12.60Ah
Max.discharge current	270A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 11.5mΩ			
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 6A)		13.50-13.80V	

## Outer dimension (mm)

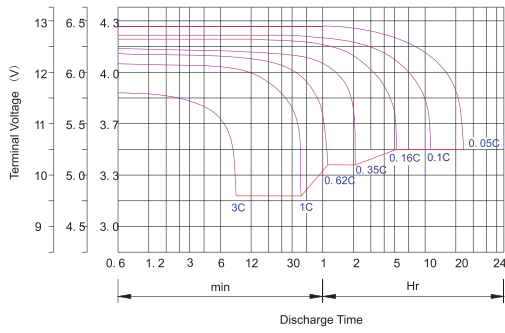


## Terminal Type (mm)

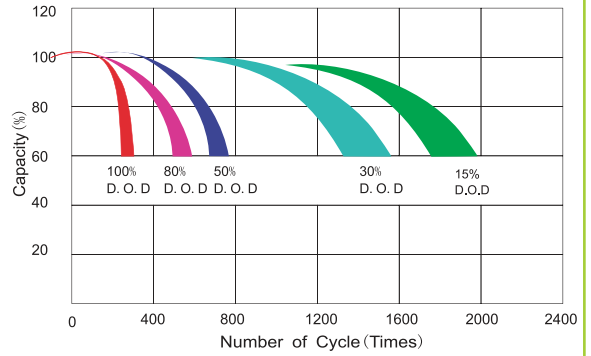
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	74.800	51.032	38.600	20.660	12.600	9.222	7.446	5.304	3.620	2.485	2.023	1.121
	138.346	97.419	74.498	41.155	25.137	18.413	14.899	10.613	7.243	4.971	4.048	2.243
1.67V	66.406	47.623	36.595	20.219	12.509	9.130	7.409	5.276	3.600	2.464	1.992	1.065
	122.801	90.902	70.683	40.296	24.957	18.235	14.837	10.576	7.216	4.940	3.994	2.135
1.70V	62.862	45.919	35.692	20.042	12.417	9.121	7.391	5.263	3.599	2.439	1.967	1.036
	116.273	87.705	68.994	39.945	24.804	18.224	14.806	10.552	7.216	4.893	3.945	2.079
1.75V	56.893	43.212	34.189	19.689	12.235	9.003	7.344	5.230	3.580	2.432	1.950	1.020
	105.236	82.553	66.155	39.270	24.500	18.005	14.711	10.491	7.181	4.883	3.915	2.048
1.80V	50.830	40.304	32.785	19.247	12.143	8.939	7.298	5.202	3.570	2.411	1.919	0.986
	94.044	77.027	63.537	38.406	24.348	17.922	14.621	10.441	7.165	4.844	3.854	1.982
1.85V	44.768	37.397	31.081	18.718	11.961	8.838	7.233	5.156	3.550	2.380	1.887	0.953
	82.852	71.501	60.296	37.376	24.017	17.765	14.497	10.358	7.132	4.786	3.795	1.916

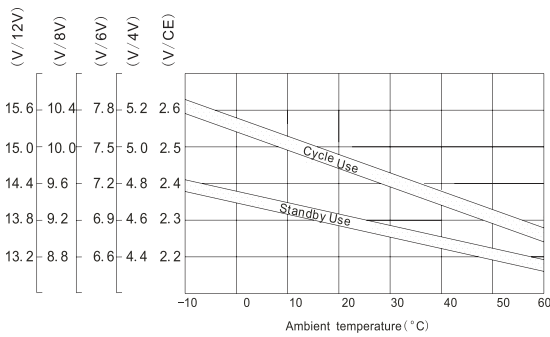
Discharge characteristic Curve



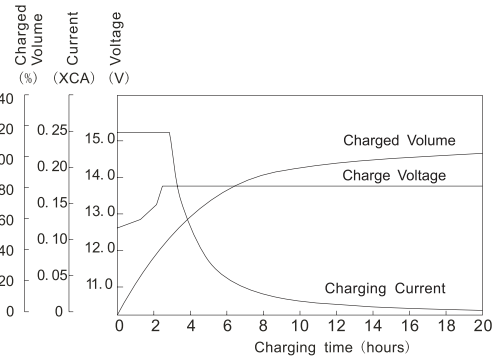
Cycle service life in relation to depth of discharge



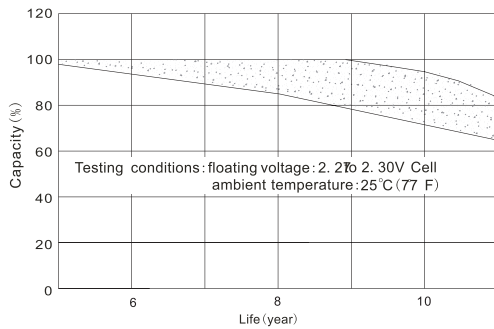
Relationship between charging voltage and temperature



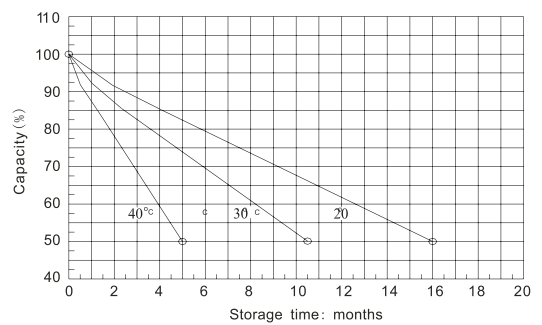
Constant voltage charging characteristic (0.25CA, at 25°C)



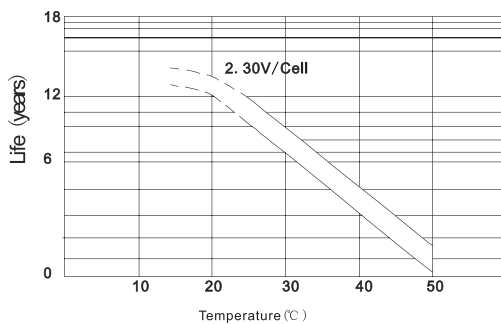
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

