

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.

- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System



### General Features

- \* Heavy Duty Grid
- \* Mechanized assembly
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Long Life and low self-discharge design

### Construction

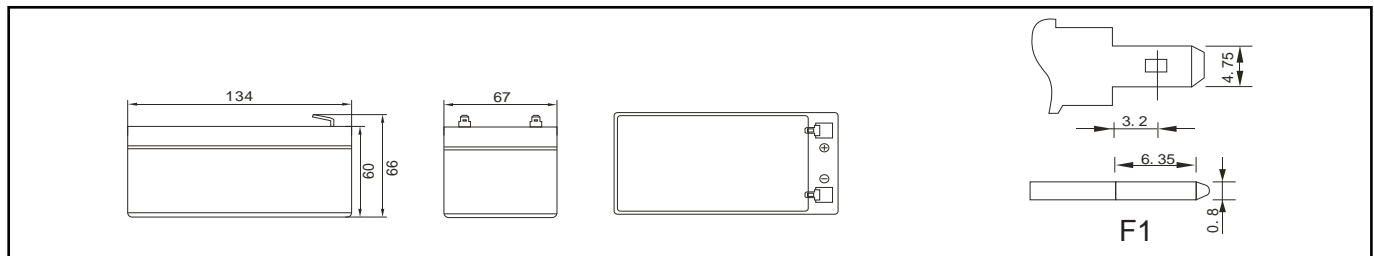
- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Sulfuric acid
- \* Separator ..... Fiber glass
- \* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

### Specification

Battery Model	Nominal Voltage			12V
	Rated capacity (20 Hour rate)			3.2Ah
	Cells Per battery			6
Dimension	Length	Width	Height	Total Height
	134mm (5.28 inches)	67mm (2.64 inches)	60mm (2.36 inches)	66mm (2.60 inches)
Approx Weight	1.25kg (2.76lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.16A,10.5V)	10 hour rate(0.3A,10.5V)	5 hour rate(0.54A,10.5V)	1 hour rate(1.98A,9.6V)
	3.2Ah	3.0Ah	2.7Ah	1.98Ah
Max.discharge current	48A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 70mΩ			
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 0.96A)			13.50-13.80V

### Outer dimension (mm)

### Terminal Type (mm)

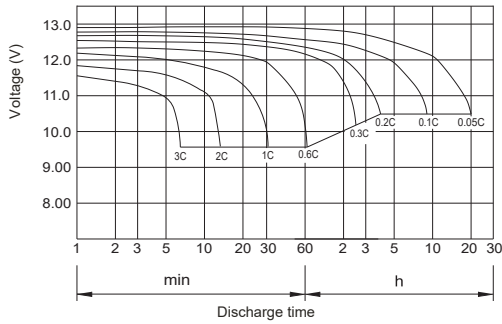


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

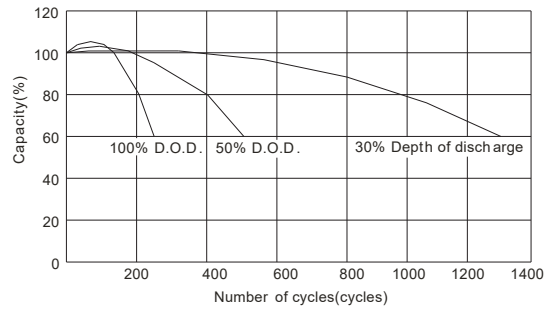
F.V.TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	11.90	7.79	5.78	3.80	1.98	1.16	0.85	0.68	0.55	0.38	0.30	0.16
	W	140.10	88.00	66.60	40.30	22.80	13.40	9.83	7.89	6.70	4.41	3.62	1.98
10.20V	A	10.90	7.45	5.31	3.60	1.86	1.11	0.83	0.66	0.55	0.38	0.30	0.16
	W	131.90	83.30	62.60	40.00	21.50	12.80	9.56	7.65	6.57	4.35	3.55	1.92
10.50V	A	9.91	6.96	4.95	3.49	1.80	1.09	0.81	0.63	0.54	0.37	0.30	0.16
	W	127.30	80.90	59.80	39.60	20.80	12.60	9.39	7.26	6.53	4.30	3.52	1.91
10.80V	A	9.53	6.66	4.62	3.40	1.74	1.06	0.80	0.62	0.54	0.36	0.29	0.15
	W	111.60	78.40	57.60	39.50	20.20	12.30	9.28	7.17	6.24	4.13	3.44	1.87
11.10V	A	8.81	6.27	4.29	3.30	1.68	1.03	0.76	0.60	0.53	0.35	0.29	0.15
	W	107.90	75.80	54.90	39.20	19.90	12.20	9.01	7.15	6.11	3.39	3.37	1.86

Note: The above data are average values. (Edition 2018-03)

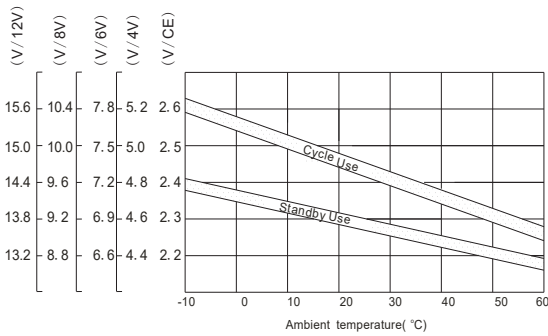
Discharge characteristic Curve



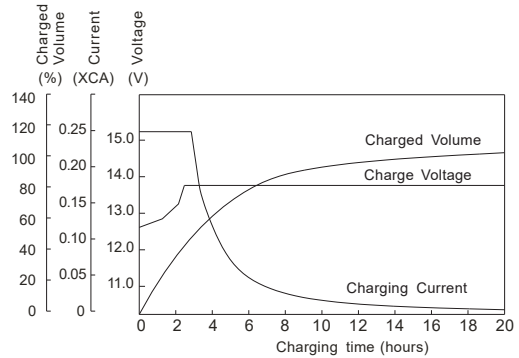
Cycle service life in relation to depth of discharge



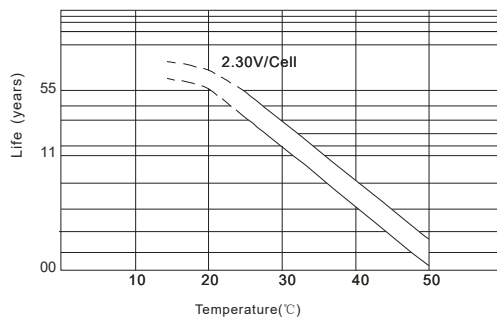
Relationship between charging voltage and temperature



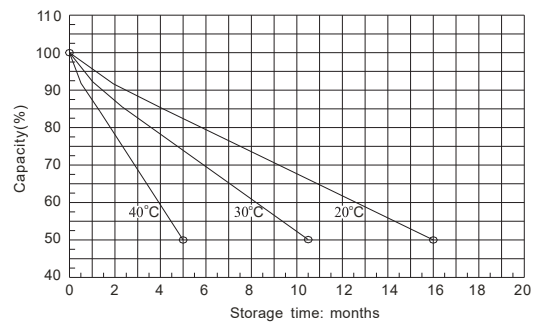
Constant voltage charging characteristic (0.25CA, at 25°C)



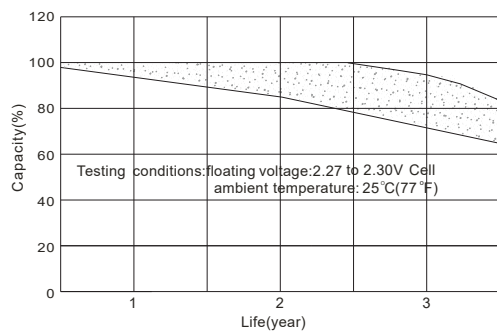
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

