General Series Battery

SY1245

General Series VRLA batteries are designed with AGM(Absorbent extra power output for common power backup system. General SeriesBatteries are the general purpose batteries with 5 years floating design life at 25℃. Glass Mat) technology,High performance plates and electrolyte togive

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

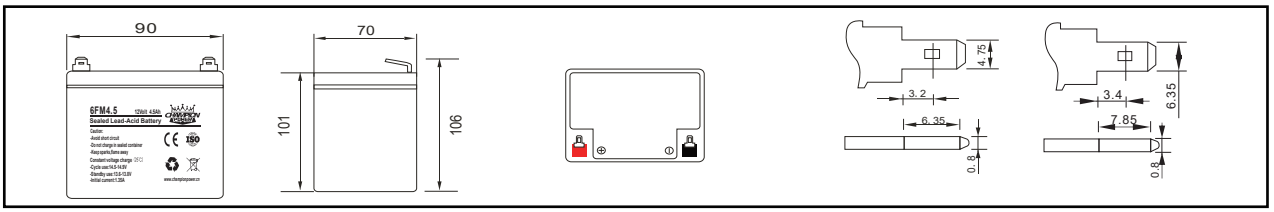
Construction

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

Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity (20Hour rate)	4.5Ah		
	Cells Per battery	6		
Dimension	Length	Width	Height	Total Height
	90mm	70mm	101mm	106mm
Approx Weight	1.45Kg			
Internal Resistance	Full charged at 25℃(77℉): Approx 35mΩ			
Max.discharge current	67.5A(5s)			
Floating design life @ 25℃ (77℉)	5 years			
Capacity @ 25℃ (77℉)	20Hour rate(0.225A/10.5V)	10Hour rate(0.405A/10.8V)	5Hour rate(0.65A/10.8V)	1Hour rate(1.73A/10.5V)
	4.5Ah	4.05Ah	3.25Ah	1.73Ah
Capacity affected by Temp(20 HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃(5℉)
	102%	100%	85%	65%
Self Discharge @ 25℃ (77℉)	After 3 months storage	After 6 months storage	After 12 months storage	
	91%	82%	64%	
Charge method @ 25℃ (77℉)	Cycle Use	14.5-14.9V (Initial charging current less than 1.35 A)		
	Float Use	13.6-13.8V		

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	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	16.20	10.58	7.88	5.18	2.70	1.58	1.17	0.93	0.79	0.52	0.43	0.23
	W	171.72	112.31	84.26	55.89	29.43	17.17	12.87	10.23	8.68	5.79	4.75	2.58
10.20V	A	14.85	9.94	7.24	4.91	2.79	1.51	1.15	0.90	0.77	0.51	0.42	0.23
	W	161.87	110.31	80.70	55.27	31.39	17.08	12.97	10.22	8.79	5.82	4.75	2.58
10.50V	A	13.77	9.50	6.75	4.76	2.70	1.48	1.13	0.86	0.77	0.51	0.41	0.23
	W	151.49	106.82	76.28	54.29	30.78	16.96	12.88	9.83	8.80	5.82	4.76	2.59
10.80V	A	12.54	9.08	6.30	4.55	2.61	1.44	1.10	0.84	0.73	0.49	0.40	0.22
	W	137.94	103.46	72.14	52.49	30.15	16.68	12.79	9.79	8.52	5.74	4.70	2.56
11.10V	A	10.85	8.55	5.85	4.23	2.48	1.41	1.06	0.82	0.70	0.48	0.39	0.21
	W	122.55	98.75	67.86	49.49	28.96	16.45	12.43	9.73	8.25	5.66	4.65	2.52

ACDC DYNAMICS

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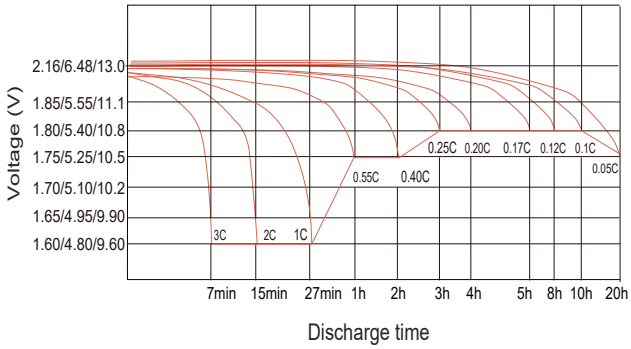
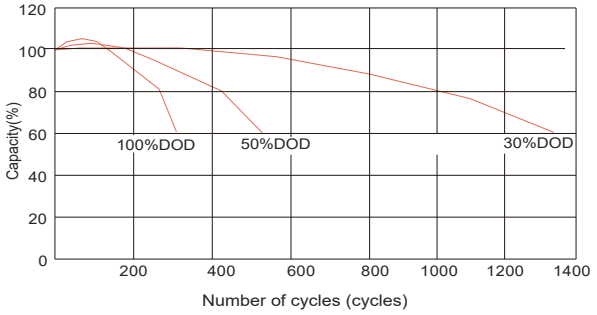
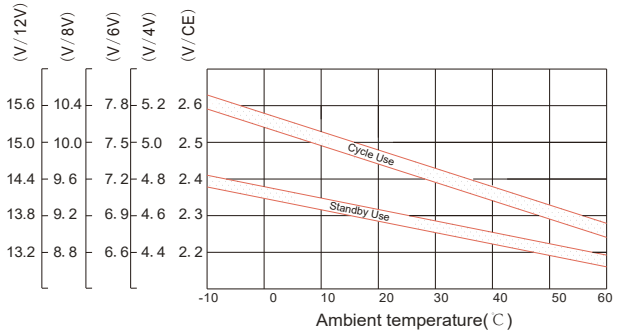
Discharge characterstic Curve



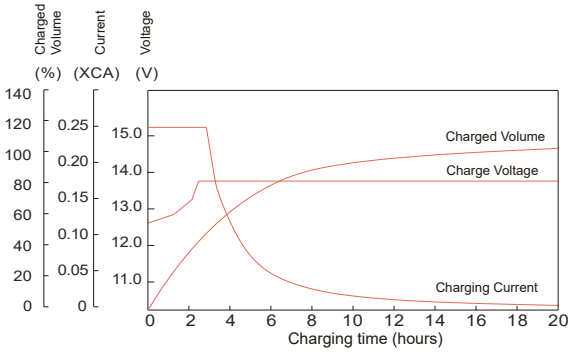
Cycle service life in relation to depth of discharge



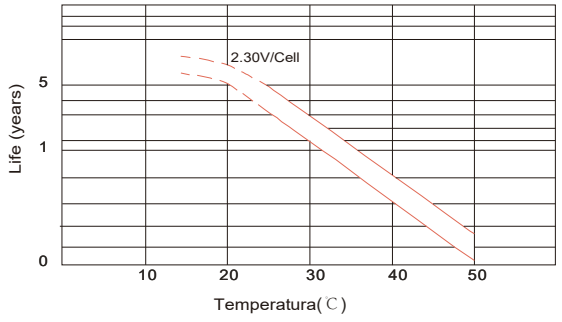
Relationship between charging voltage and temperature



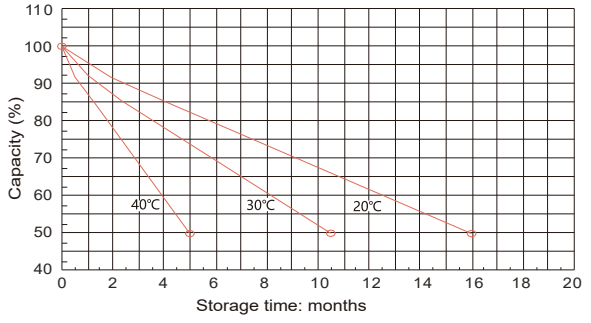
Constant voltage charging characteristic (0.25CA, at 25˚C)



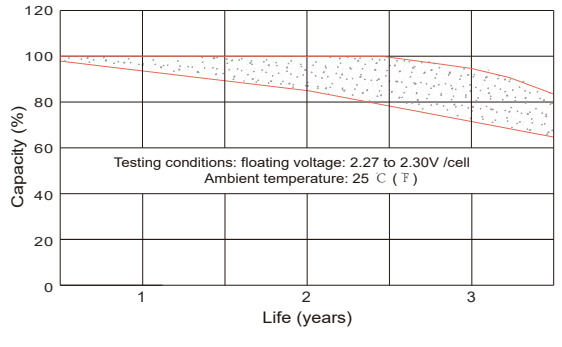
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characterstic for standby use

