General Series Battery

SY1212

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



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

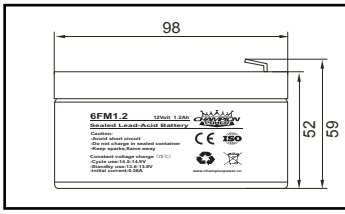
Construction

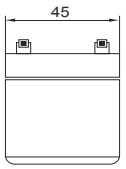
- Positive.....Lead dioxide
- Electrolyte.....Sulfuric acid
- Separator.....Fiber glass
- Container.....ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- Negative.....Lead
- Safety Valve.....EPDR
- Terminal.....Copper

Specification

Battery Model	Nominal Voltage	12V		
	Rated capacity (20Hour rate)	1.2Ah		
	Cells Per battery	6		
Dimension	Length	Width	Height	Total Height
	98mm	45mm	52mm	59mm
Approx Weight	0.51Kg			
Internal Resistance	Full charged at 25℃(77℉): Approx 130mΩ			
Max.discharge current	18A(5s)			
Floating design life @ 25℃ (77℉)	5 years			
Capacity @ 25℃ (77℉)	20Hour rate(0.06A/10.5V)	10Hour rate(0.11A/10.8V)	5Hour rate(0.17A/10.8V)	1Hour rate(0.46A/10.5V)
	1.2Ah	1.1Ah	0.86Ah	0.46Ah
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 0.36 A)		
	Float Use	13.6-13.8V		

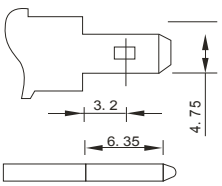
Outer Dimension(mm)







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	4.32	2.82	2.10	1.38	0.72	0.42	0.31	0.25	0.21	0.14	0.11	0.06
	W	45.79	29.95	22.47	14.90	7.85	4.58	3.43	2.73	2.32	1.54	1.27	0.69
10.20V	A	3.96	2.65	1.93	1.31	0.74	0.40	0.31	0.24	0.21	0.14	0.11	0.06
	W	43.16	29.41	21.52	14.74	8.37	4.55	3.46	2.72	2.34	1.55	1.27	0.69
10.50V	A	3.67	2.53	1.80	1.27	0.72	0.40	0.30	0.23	0.20	0.14	0.11	0.06
	W	40.40	28.49	20.34	14.48	8.21	4.52	3.44	2.62	2.35	1.55	1.27	0.69
10.80V	A	3.34	2.42	1.68	1.21	0.70	0.38	0.29	0.22	0.20	0.13	0.11	0.06
	W	36.78	27.59	19.24	14.00	8.04	4.45	3.41	2.61	2.27	1.53	1.25	0.68
11.10V	A	2.89	2.28	1.56	1.13	0.66	0.38	0.28	0.22	0.19	0.13	0.11	0.06
	W	32.68	26.33	18.10	13.20	7.72	4.39	3.31	2.60	2.20	1.51	1.24	0.67

ACDC DYNAMICS

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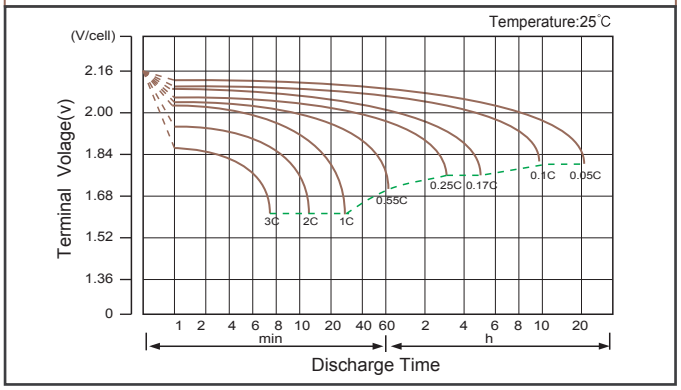
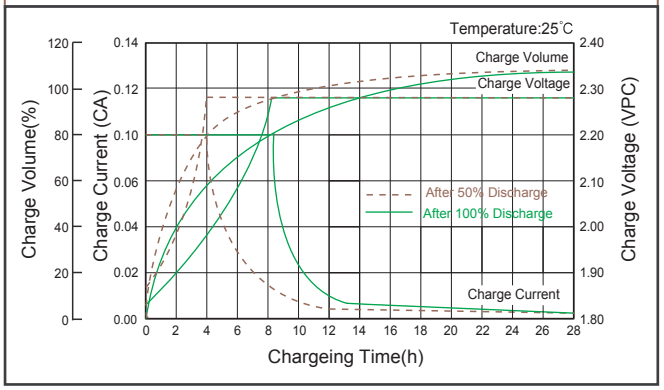
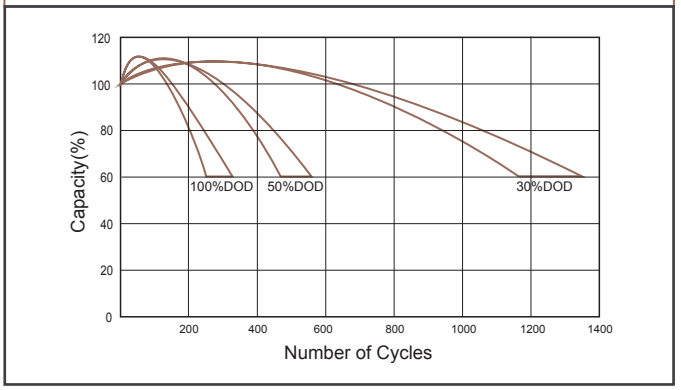
Discharge characteristic Curve



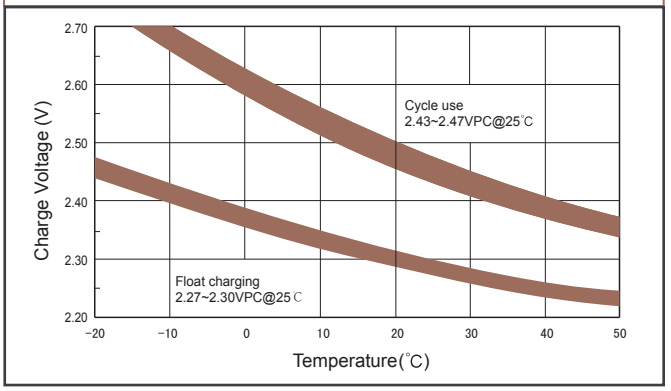
Charge Characteristic Curve For Standby Use



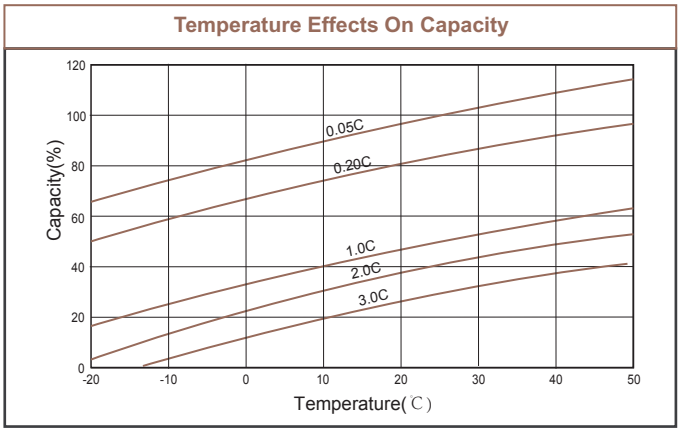
Cycle service life in relation to depth of discharge



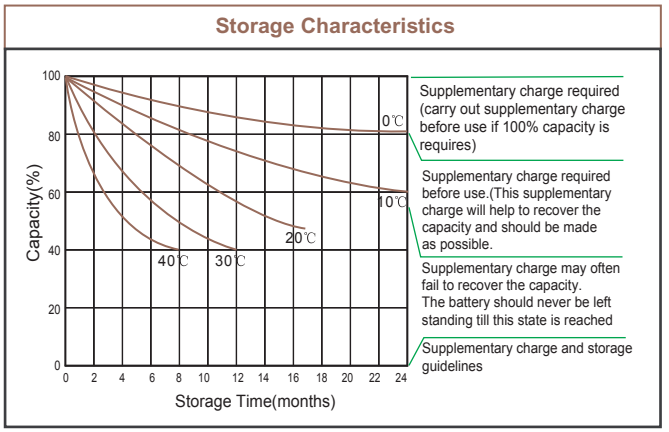
Relationship Between Charging Voltage And Temperature



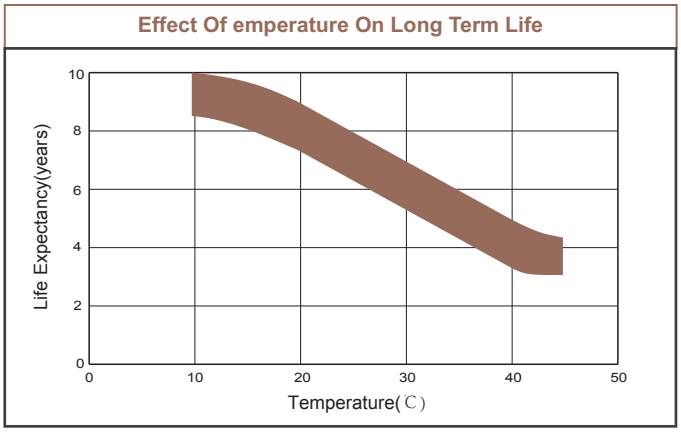
Temperature Effects On Capacity



Storage Characteristics



Effect Of emperature On Long Term Life



Charge Characteristic Curve For Standby Use

