

General Series Battery

ReFortis General (GP) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 5 years floating design life at 25 °C Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.

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

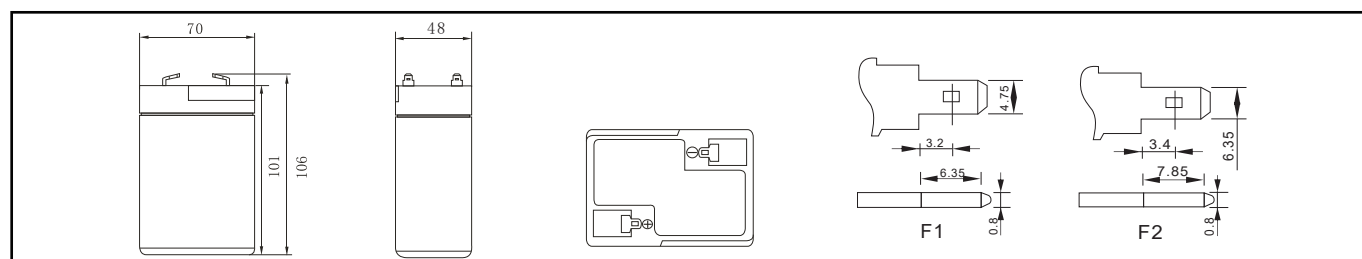
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper



Specification

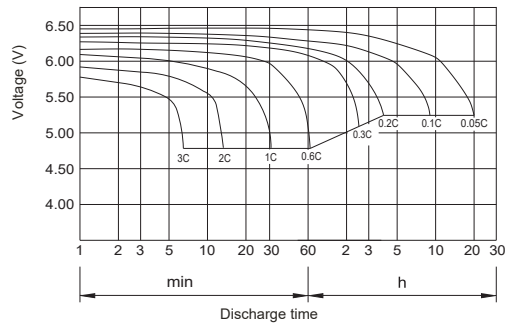
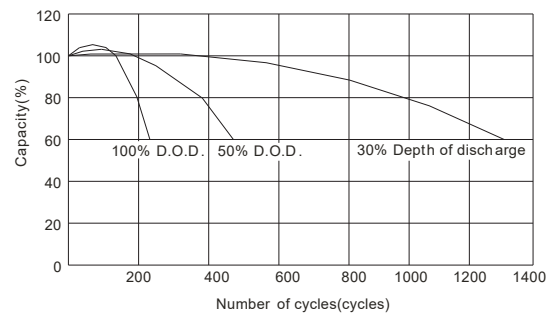
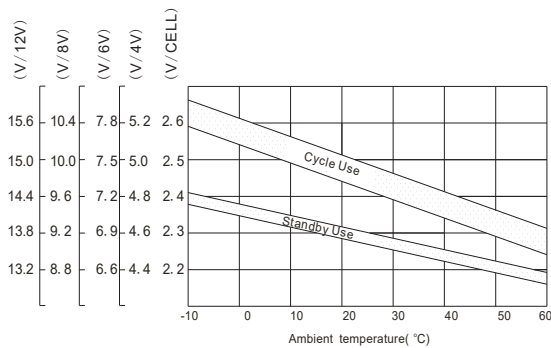
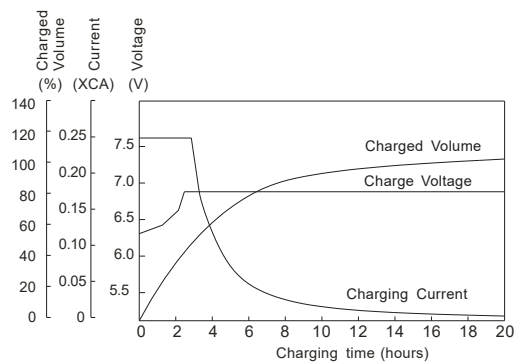
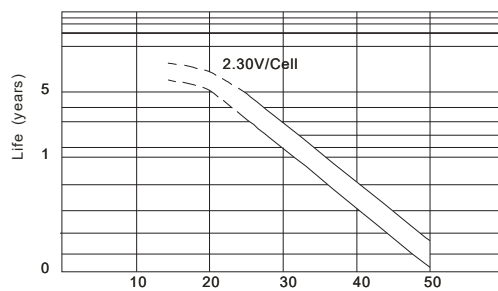
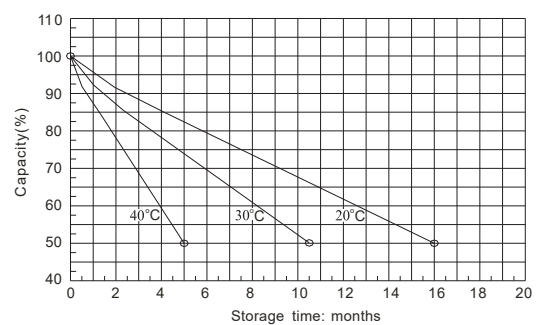
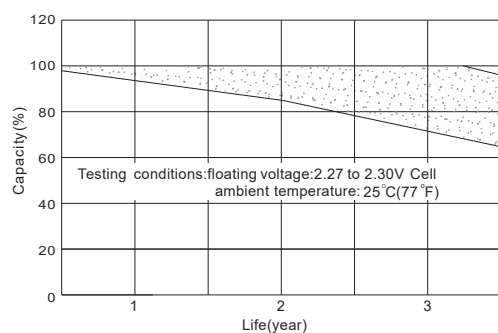
Battery Model	Nominal Voltage		6V	
	Rated capacity (20 Hour rate)		4.5Ah	
	Cells Per battery		3	
Dimension	Length	Width	Height	Total Height
	70mm (2.75 inches)	47mm (1.85 inches)	100mm (3.93 inches)	105mm (4.13 inches)
Approx Weight	0.68kg (1.49lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.225A,10.5V)	10 hour rate(0.443A,10.8V)	5 hour rate(0.77A,10.5V)	1 hour rate(2.55A,9.6V)
	4.5Ah	4.43Ah	3.85Ah	2.55Ah
Max.discharge current	67.5A (5 Sec.)			
Internal Resistance	Full charged at 25°C(77°F): Approx 21mΩ			
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	
	7.20-7.50V (Initial charging current less than 1.35A)		6.80-6.90V	

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	15.192	10.709	8.100	4.870	2.550	1.866	1.609	1.146	0.782	0.573	0.467	0.247
	28.098	20.443	15.633	9.701	5.087	3.726	3.219	2.293	1.565	1.147	0.934	0.495
1.67V	13.487	9.994	7.679	4.766	2.532	1.848	1.601	1.140	0.778	0.569	0.460	0.235
	24.941	19.075	14.832	9.499	5.051	3.690	3.206	2.285	1.559	1.140	0.922	0.471
1.70V	12.767	9.636	7.490	4.724	2.513	1.846	1.597	1.137	0.778	0.563	0.454	0.229
	23.615	18.404	14.478	9.416	5.020	3.688	3.199	2.280	1.559	1.129	0.910	0.459
1.75V	11.555	9.068	7.174	4.641	2.476	1.822	1.587	1.130	0.773	0.561	0.450	0.225
	21.374	17.323	13.882	9.257	4.958	3.644	3.178	2.267	1.552	1.127	0.903	0.452
1.80V	10.324	8.458	6.880	4.537	2.458	1.809	1.577	1.124	0.771	0.556	0.443	0.218
	19.100	16.164	13.333	9.053	4.928	3.627	3.159	2.256	1.548	1.118	0.889	0.437
1.85V	9.092	7.848	6.522	4.412	2.421	1.789	1.563	1.114	0.767	0.549	0.435	0.210
	16.827	15.004	12.653	8.810	4.861	3.595	3.132	2.238	1.541	1.104	0.876	0.423

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
