NEWSTAR

NP613 (6V1.3Ah)

NP General Series Battery

NP General 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.
NP series Batteries are the general purpose batteries with 3-5 years floating design life at 25℃.
Meet with IEC, BS,JIS and Eurobat standard.



Application

*Emergency Power System
*Communication equipment
*Telecommunication systems
*Uninterruptible power supplies
*Electric bicycle and wheelchairs, etc.
*Power tools
*Alarm system
*Marine equipment
*Fire and Security 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

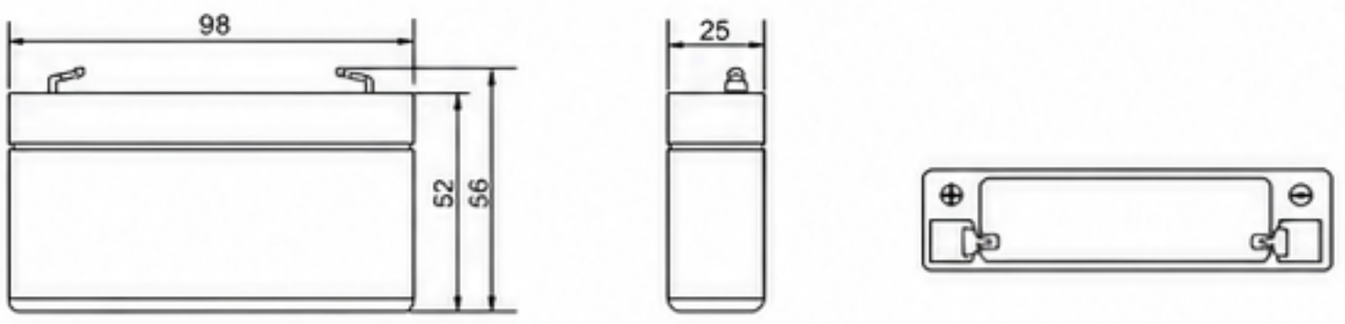
Construction

*Positive .....Lead dioxide
*Electrolyte .....Sulfuric acid
*Separator .....Fiber glass
*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
*Negative .....Lead
*Safety Valve .....EPDR
*Terminal .....Copper

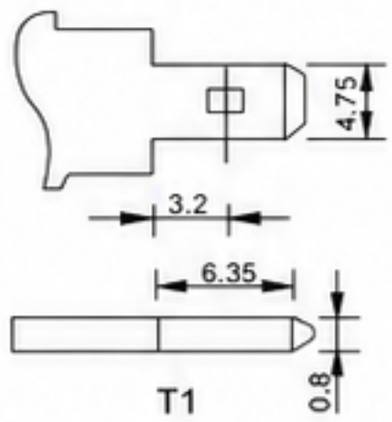
Specification

Battery Model	Nominal Voltage	6V		
	Rated capacity(20 Hour rate)	1.3Ah		
Dimensions	Length	Width	Height	Total Height
	98mm (3.86 inches)	25mm(0.98 inches)	52mm(2.05 inches)	56mm (2.20inches)
Approx Weight	0.30kg(0.66 lbs) ±3%			
Capacity 25℃ (77°F)	20 hour rate (0.065A,5.4V)	10 hour rate(0.12A,5.25V)	5 hour rate (0.22A,5.1V)	1 hour rate (0.78A,4.8V)
	1.3Ah	1.2Ah	1.1Ah	0.78Ah
Max.discharge current	13A (5 Sec.)			
Internal Resistance	Full charged at 25 ℃ (77°F): Approx 66mΩ			
Capacity affected by Temp. (20 HR)	40℃ (104 °F)	25℃ (77°F)	0℃ (32°F)	-15℃ (5°F)
	102%	100%	85%	65%
Self Discharge at 25℃ (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method 25℃ (77°F)	Cycle Use		Float Use	
	7.05-7.20V (Initial charging current less than 0.39A)		6.75-6.90V	

Outer dimensions (mm)



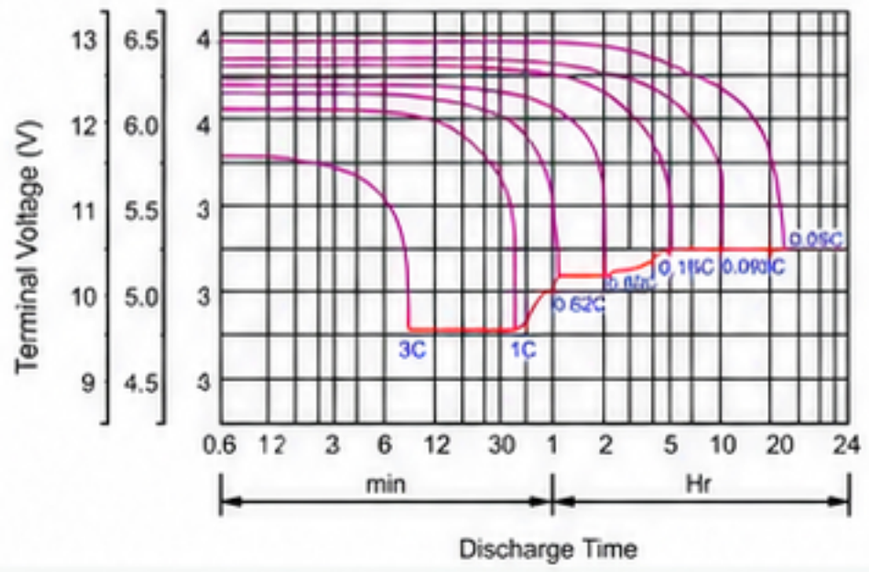
Terminal Type (mm)



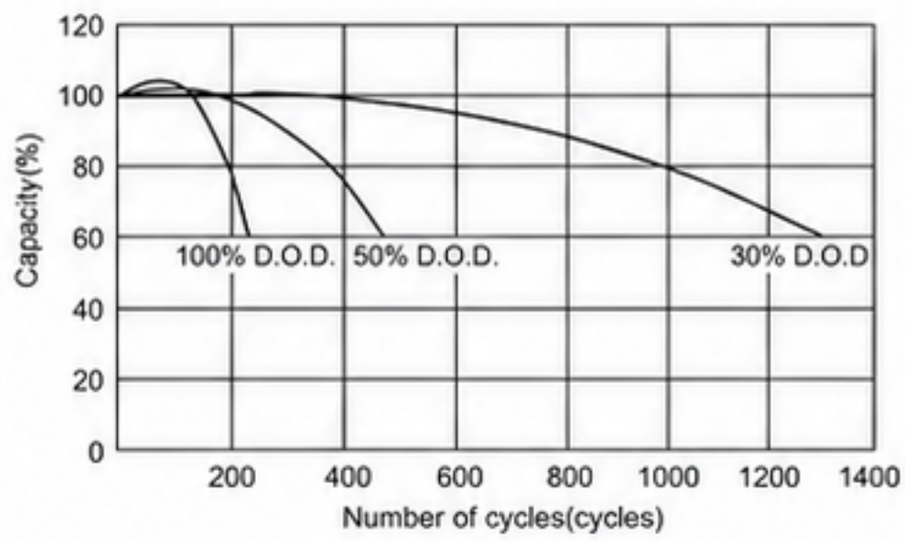
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77°F)

Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
4.80V	A	4.50	2.82	2.19	1.44	0.78	0.46	0.33	0.27	0.23	0.15	0.12	0.07
	W	26.50	16.70	12.60	7.60	4.50	2.60	1.94	1.55	1.32	0.87	0.71	0.39
5.10V	A	4.13	2.76	2.01	1.36	0.73	0.44	0.33	0.26	0.22	0.15	0.12	0.07
	W	25.00	16.40	11.80	7.60	4.20	2.50	1.88	1.51	1.29	0.86	0.70	0.38
5.25V	A	3.83	2.64	1.88	1.32	0.71	0.43	0.32	0.25	0.22	0.15	0.12	0.07
	W	24.10	15.30	11.30	7.50	4.10	2.50	1.85	1.43	1.29	0.85	0.69	0.38
5.40V	A	3.48	2.52	1.75	1.26	0.68	0.42	0.31	0.24	0.21	0.14	0.12	0.06
	W	23.00	14.80	10.90	7.50	4.00	2.40	1.83	1.41	1.23	0.81	0.68	0.37
5.55V	A	3.01	2.38	1.63	1.18	0.66	0.41	0.30	0.24	0.20	0.14	0.11	0.06
	W	17.90	14.30	10.40	7.40	3.90	2.40	1.77	1.41	1.20	0.79	0.66	0.37

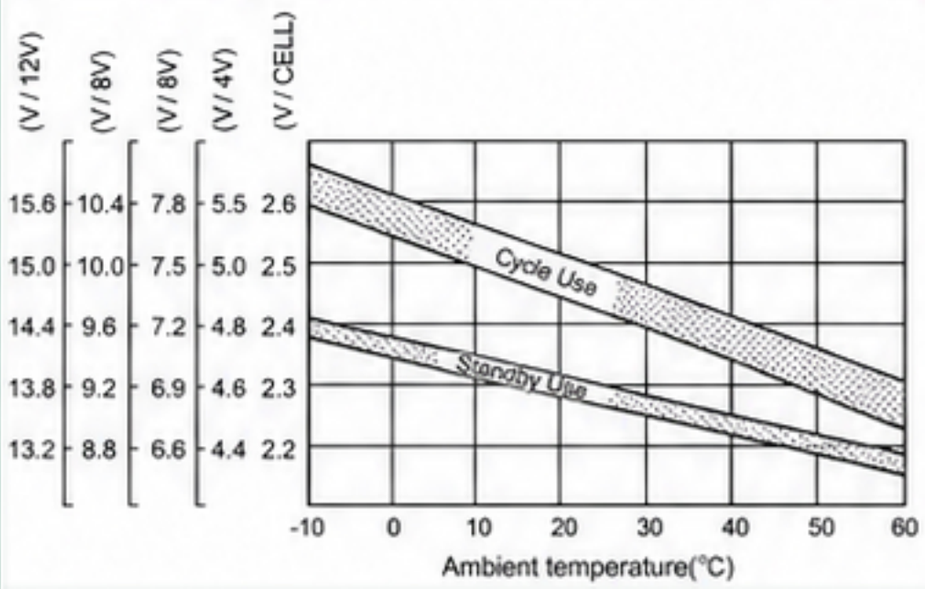
Discharge characteristic Curve



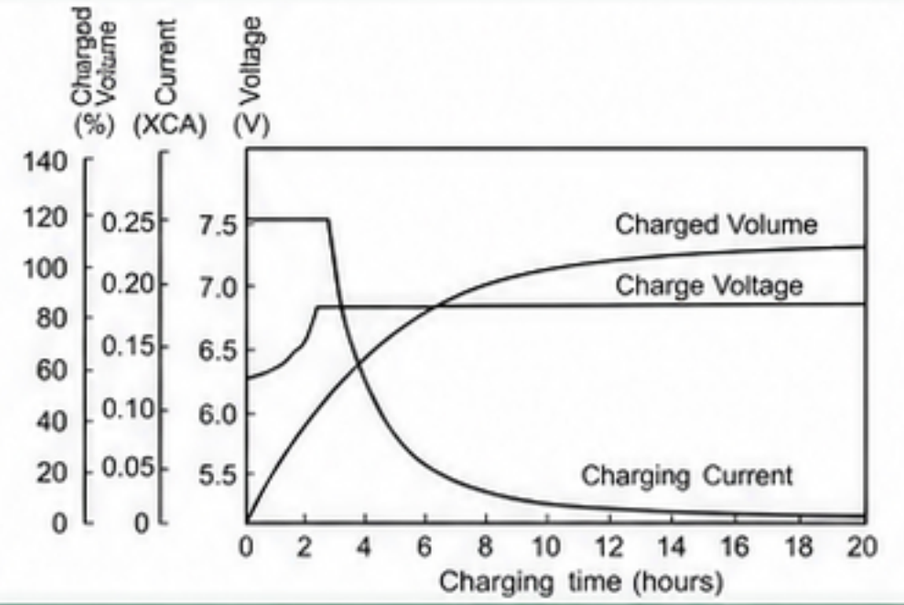
Cycle service life in relation to depth of discharge



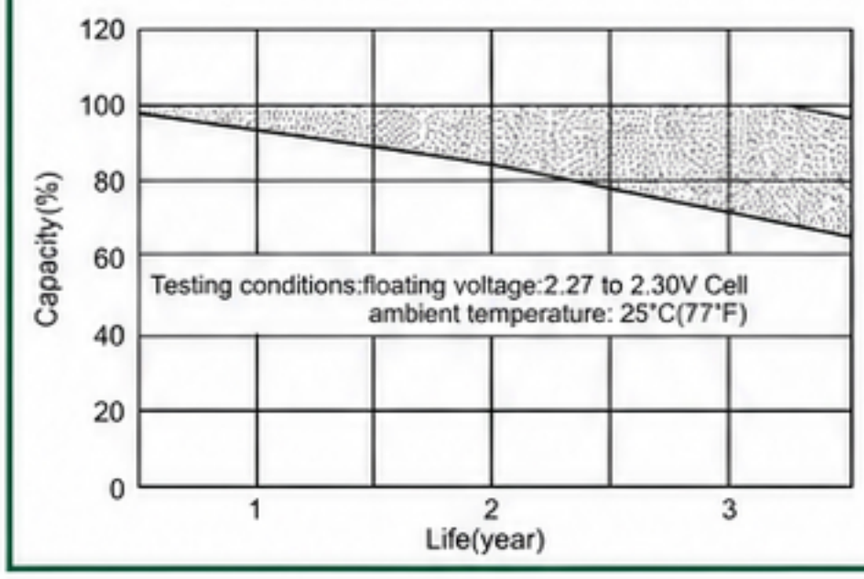
Relationship between charging voltage and temperature



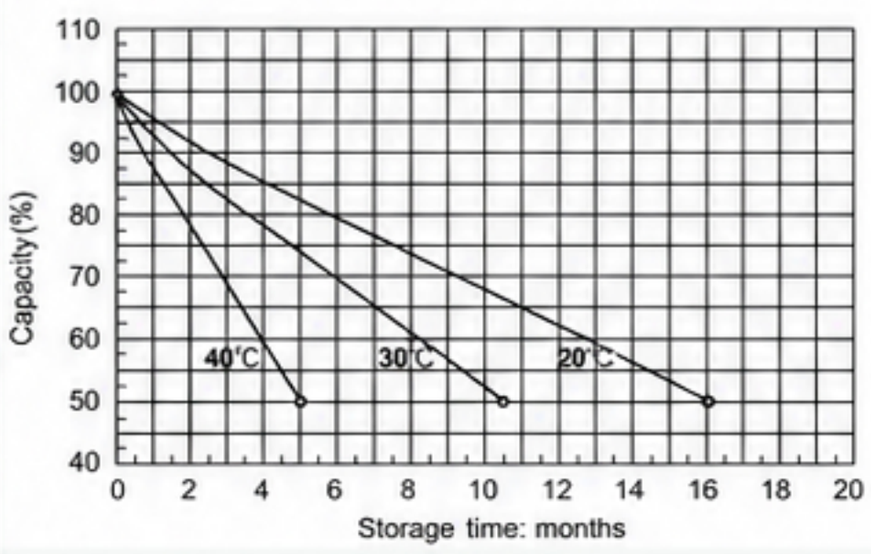
Constant voltage charging characteristic (0.25CA, at 25°C)



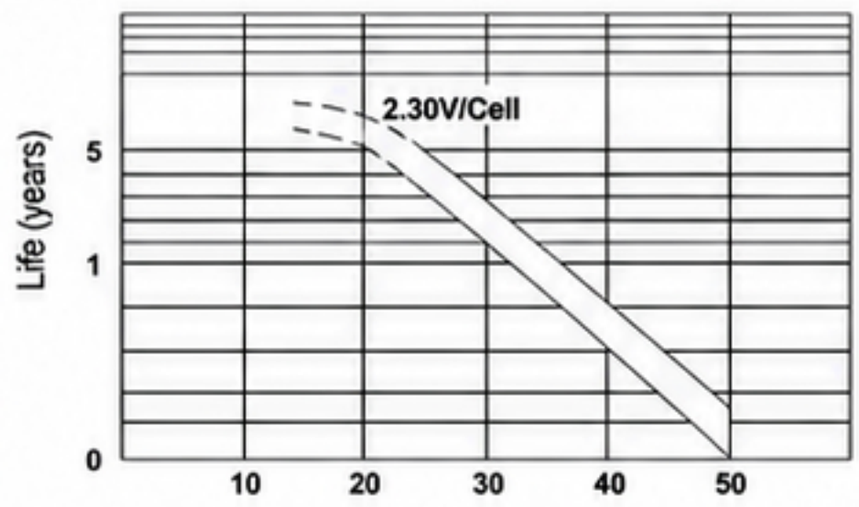
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

