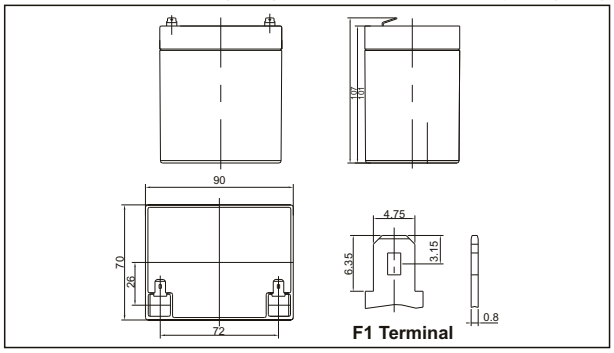
BALA500012V

BALA500012V is a general purpose battery with 6~8 years design life in float service.It meets with IEC and JIS standards.With up-dated AGM valve regulated technology and high purity raw materials,the battery has reliable standby service life.It is suitable for UPS/EPS,medical equipment,emergency light and security systems applications.

Outer dimensions (mm)

Terminal Type (mm)



Specifications

Nominal Voltage		12V
Rated capacity (20 hr to1.75V per cell @ 25°C)		5Ah
Dimensions	Length	90±1mm(3.54 inch)
	Width	70±1mm(2.76 inch)
	Height	101±1mm(3.98 inch)
	Total Height	106±1mm(4.21 inch)
Weight Approx.		1.5 kg(3.31 lbs)±3%

Characteristics

capacity(25°C)	20HR	5.00AH
	10HR	4.67AH
	5HR	4.36AH
Terminal type		F1
Inner resistance (fully charged,25°C)		Approx.42mΩ
Capacity affected by temperature	40°C	102%
	25°C	100%
	0°C	85%
	15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C±3°C(77°F±5°F)
Operating temperature range	Discharge	-15°C~50°C(5°F~122°F)
	Charge	-10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Maximum charge current		1.5A
Maximum discharge current		50A(5 sec.)
Designed life		6~8 years

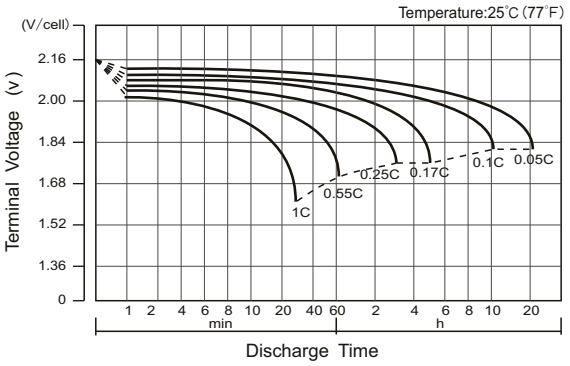
Construction

Component	Positive plate	Negative plate	Container&Cover	Separator	Electrolyte	Safety value	Terminal
Raw materail	Lead dioxide	Lead	ABS UL94-HB,UL94-V0 Optional.	AGM	Sulfuric acid	Rubber	Copper

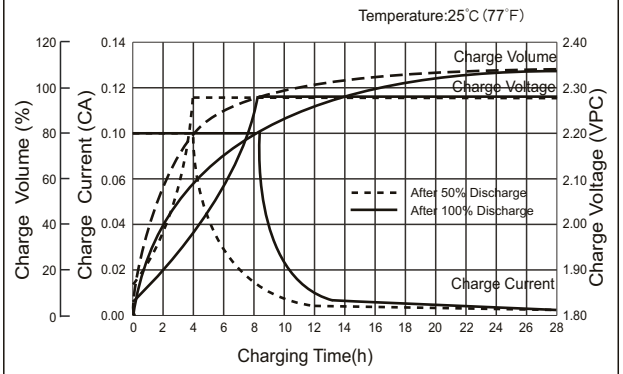
Constant Current Discharge (Amperes/cell) at 25°C (77°F)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	18.97	13.41	9.692	5.567	3.055	1.876	1.41	1.138	0.943	0.607	0.493	0.26
1.65V	17.64	12.67	9.266	5.344	2.95	1.816	1.366	1.108	0.919	0.6	0.487	0.256
1.70V	15.92	11.66	8.679	5.108	2.854	1.756	1.329	1.077	0.895	0.591	0.48	0.253
1.75V	14.26	10.68	8.076	4.882	2.75	1.695	1.29	1.05	0.872	0.583	0.473	0.25
1.80V	12.52	9.664	7.457	4.666	2.645	1.634	1.25	1.02	0.85	0.573	0.467	0.248
1.85V	9.939	7.898	6.188	4.019	2.372	1.497	1.155	0.948	0.792	0.538	0.44	0.235
Constant Power Discharge (watts/cell) at 25°C (77°F)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	31.45	22.79	16.94	10.11	5.741	3.555	2.693	2.185	1.818	1.186	0.969	0.513
1.65V	29.58	21.95	16.44	9.809	5.576	3.458	2.621	2.134	1.778	1.175	0.959	0.505
1.70V	27.3	20.58	15.63	9.469	5.428	3.363	2.561	2.084	1.737	1.159	0.945	0.5
1.75V	25	19.18	14.75	9.144	5.261	3.26	2.495	2.038	1.699	1.145	0.934	0.494
1.80V	22.42	17.66	13.82	8.828	5.089	3.159	2.427	1.987	1.661	1.128	0.923	0.49
1.85V	18.17	14.69	11.63	7.679	4.593	2.911	2.254	1.854	1.555	1.062	0.871	0.466

The above characteristics represent average values and can be obtained within three charge and discharge cycles. The batteries must be fully charged before testing.
The data in this document is subject to change without notice. Please contact NEDIS for the latest available version.

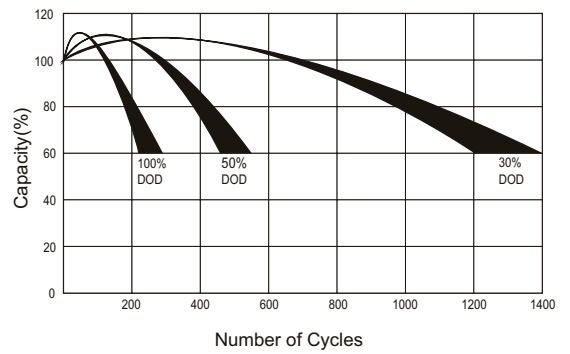
Discharge Characteristics Curve



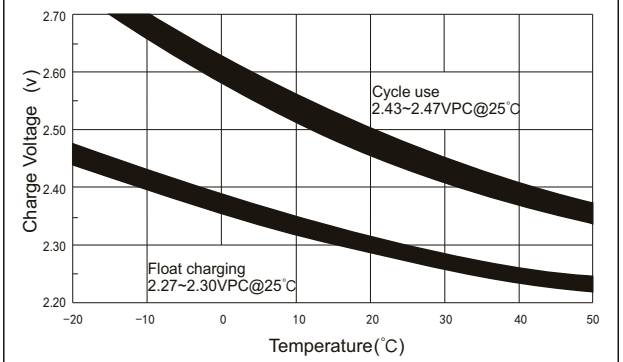
Charge Characteristic Curve for Standby Use



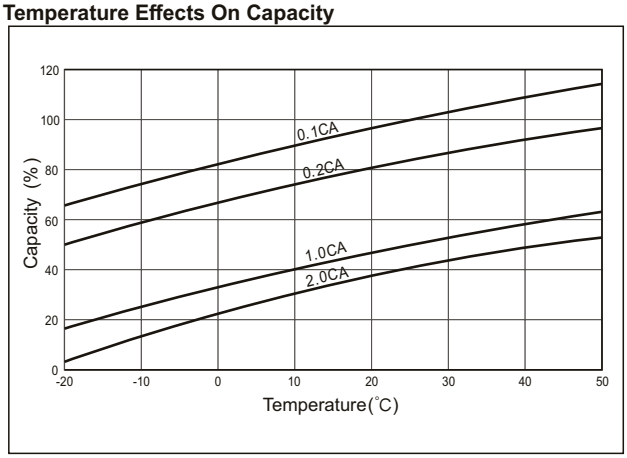
Cycle Life in Relation to Depth of Discharge



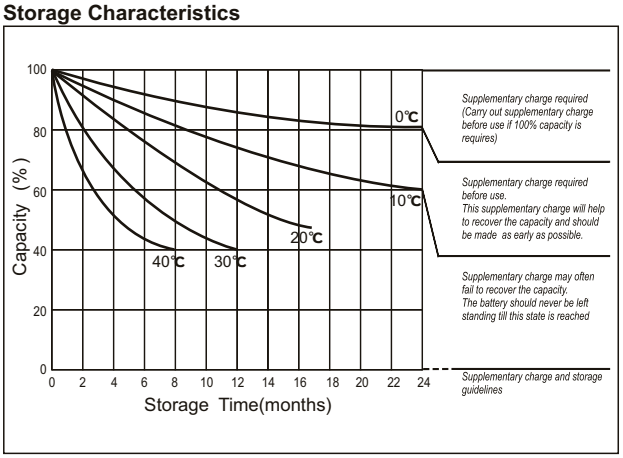
Relationship Between Charging Voltage and Temperature



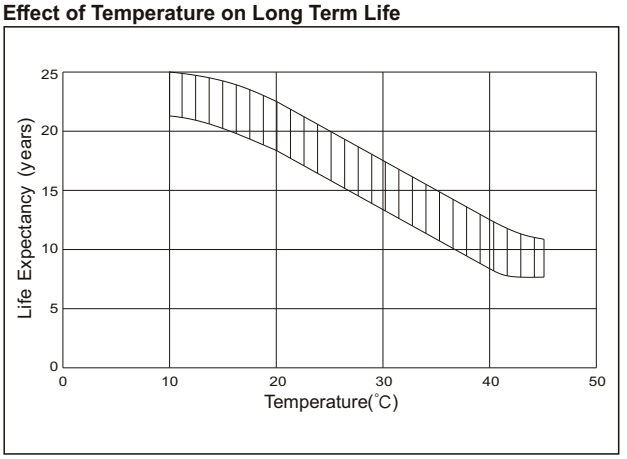
Temperature Effects On Capacity



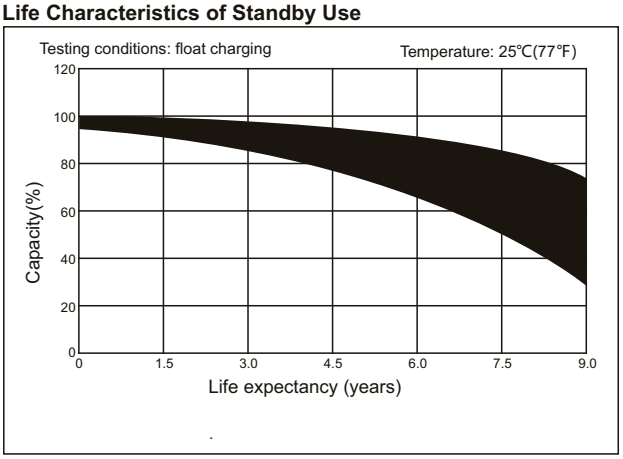
Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics of Standby Use



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