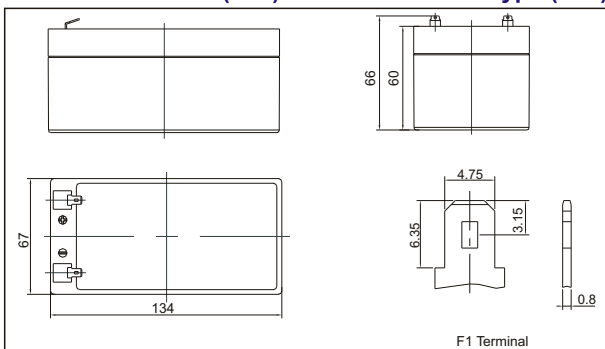


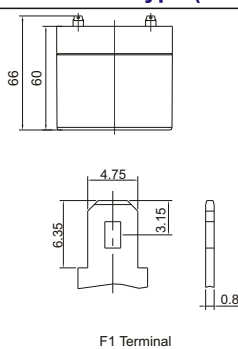
BALA320012V is a general purpose battery with 6~8 years design life in float service. It meets with IEC and JIS standards. With up-dated AGM valve regulated technology and high purity raw materials, the battery has reliable standby service life. It is suitable for UPS/EPS, medical equipment, emergency light and security systems applications.



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

capacity(25°C)	20HR	3.20AH
	10HR	3.01AH
	5HR	2.80AH
Terminal type		F1
Inner resistance (fully charged, 25°C)		Approx. 45mΩ
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		0.96A
Maximum discharge current		32A(5 sec.)
Designed life		6~8 years

Specifications

Nominal Voltage		12V
Rated capacity (20 hr to 1.75V per cell @ 25°C)		3.2Ah
Dimensions	Length	134±1mm(5.28 inch)
	Width	67±1mm(2.64 inch)
	Height	60±1mm(2.36 inch)
	Total Height	66±1mm(2.60 inch)
Weight Approx.		1.23 kg(2.71 lbs)±3%

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)

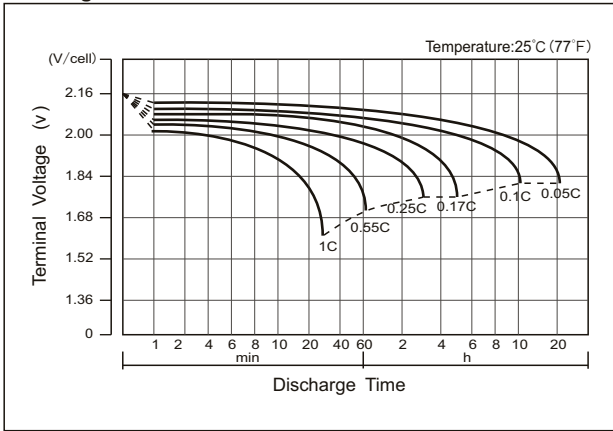
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	12.69	8.274	6.104	3.533	2.041	1.204	0.875	0.697	0.589	0.393	0.320	0.167
1.65V	12.23	8.028	5.944	3.455	2.003	1.187	0.864	0.688	0.582	0.389	0.317	0.165
1.70V	11.63	7.704	5.734	3.352	1.953	1.163	0.848	0.677	0.573	0.384	0.313	0.164
1.75V	10.87	7.286	5.46	3.218	1.887	1.132	0.828	0.662	0.561	0.377	0.308	0.161
1.80V	9.901	6.751	5.108	3.044	1.801	1.091	0.801	0.641	0.545	0.368	0.301	0.158
1.85V	8.713	6.082	4.663	2.822	1.691	1.038	0.765	0.615	0.524	0.355	0.291	0.154

Constant Power Discharge (watts/cell) at 25°C (77°F)

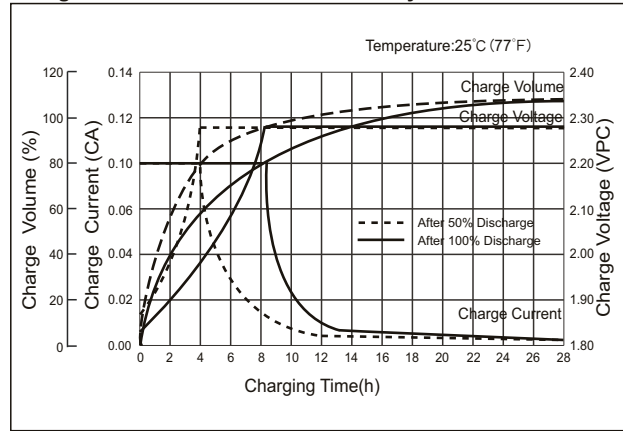
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	21.84	14.28	10.83	6.51	3.87	2.32	1.7	1.36	1.15	0.78	0.64	0.33
1.65V	21.61	14.22	10.77	6.46	3.84	2.3	1.68	1.35	1.14	0.77	0.63	0.33
1.70V	20.78	13.80	10.48	6.31	3.76	2.26	1.66	1.33	1.13	0.76	0.63	0.33
1.75V	19.76	13.28	10.12	6.12	3.65	2.21	1.63	1.30	1.11	0.75	0.62	0.32
1.80V	18.32	12.52	9.61	5.85	3.50	2.14	1.58	1.27	1.08	0.74	0.6	0.32
1.85V	16.41	11.48	8.89	5.47	3.31	2.05	1.52	1.22	1.04	0.71	0.58	0.31

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.

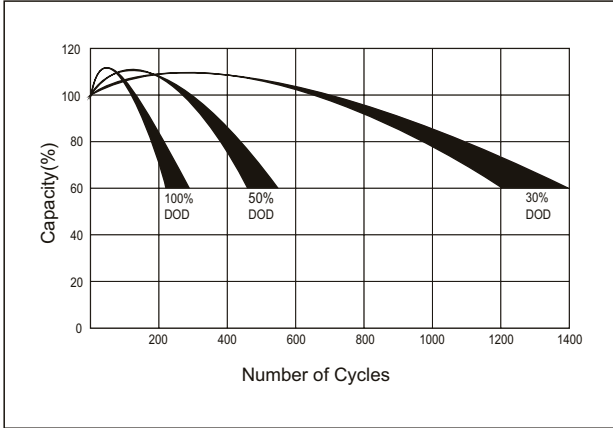
Discharge Characteristics Curve



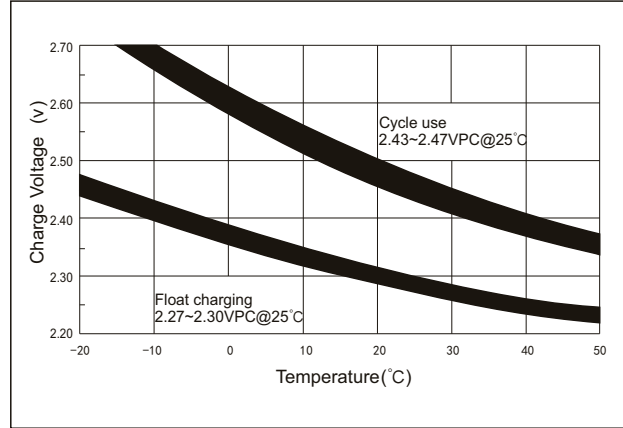
Charge Characteristic Curve for Standby Use



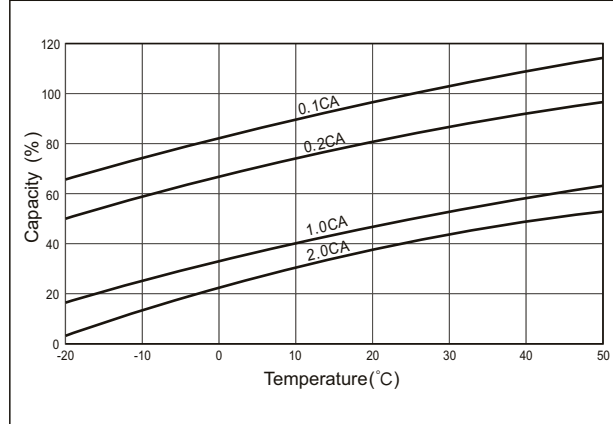
Cycle Life in Relation to Depth of Discharge



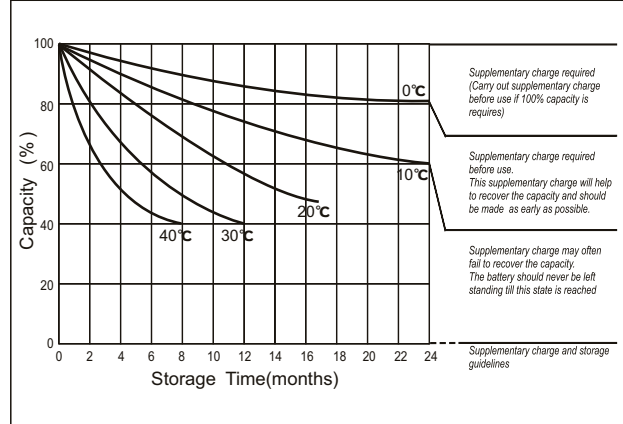
Relationship Between Charging Voltage and Temperature



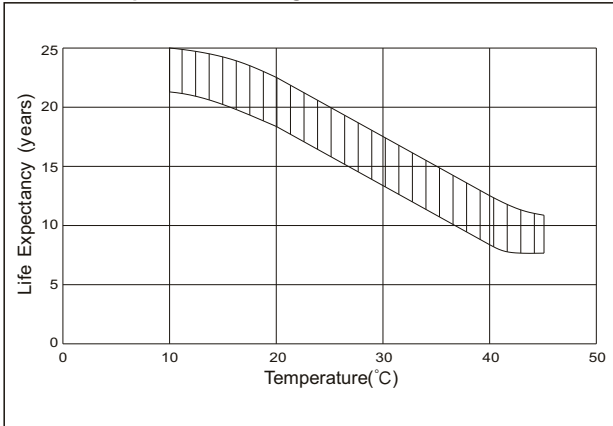
Temperature Effects On Capacity



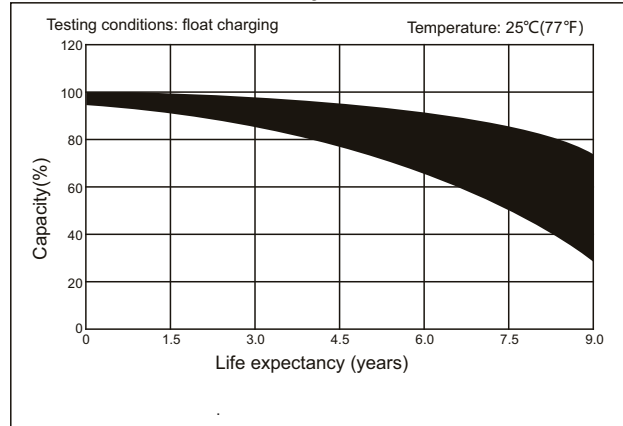
Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics of Standby Use



Please note that all information above is subject to change without prior notice. NEDIS reserve the right to explain and update latest information.

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