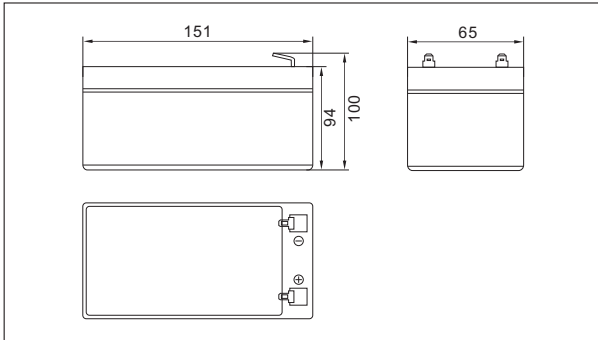


**CHALLENGER**

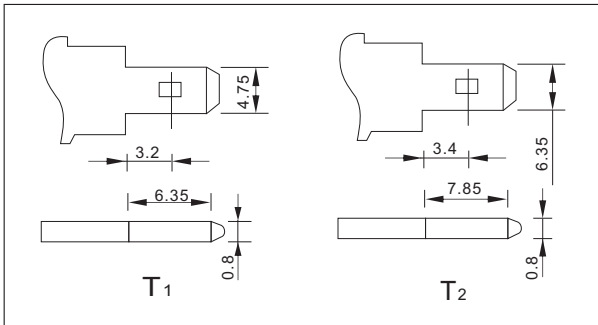
YOUR PARTNER IN A MORE SECURE FUTURE

## AA63(12V7AH)SLA Battery

### ● Outer dimensions (mm)



### ● Terminal Type (mm)



### ● Specifications

Nominal Voltage	12V	
Rated capacity (20 hour rate)	7Ah	
Dimensions	Length	151 ± 1.5mm(5.94inch)
	Width	65 ± 1mm(2.56inch)
	Height	94 ± 1mm(3.70inch)
	Total Height	100 ± 1mm(3.94inch)
Weight Approx	2.1kg(4.63lbs) ± 3%	



### ● Characteristics

Capacity (25°C)	20HR(10.5V)	7.0Ah
	10HR(10.5V)	6.5Ah
	1HR(9.60V)	4.5Ah
Terminal type		T1/T2
Internal resistance (Fully charged, 25°C)		Approx. 24m Ω
Capacity affected by temperature (20AH)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3month	Remaining Capacity:91%
	6month	Remaining Capacity:82%
	12month	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)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		2.1A
Maximum discharge current		105A(5 sec.)
Desigend floating life(20°C)		5 years

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

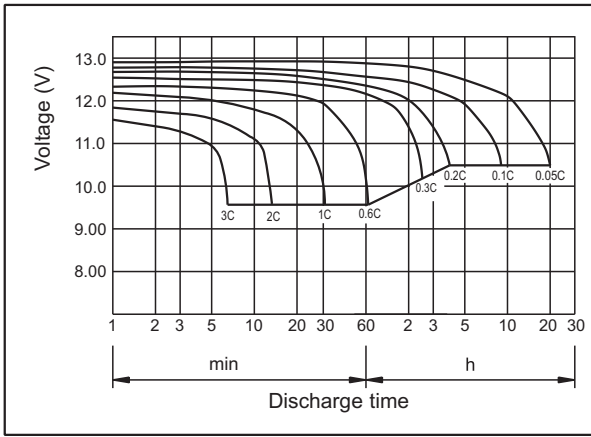
Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	25.2	16.5	12.3	8.05	4.20	2.45	1.80	1.45	1.23	0.81	0.66	0.36
	W	262	177	131	86.6	45.4	26.9	20.1	16.3	14.0	9.29	7.65	4.21
10.20V	A	23.1	15.8	11.3	7.64	3.94	2.35	1.75	1.40	1.20	0.80	0.65	0.35
	W	248	177	126	85.8	44.6	27.1	20.3	16.3	14.0	9.32	7.64	4.14
10.50V	A	21.0	14.8	10.5	7.41	3.82	2.30	1.72	1.33	1.19	0.79	0.64	0.35
	W	231	168	120	85.3	44.2	26.7	20.1	15.6	14.0	9.26	7.62	4.14
10.80V	A	20.2	14.1	9.80	7.20	3.69	2.25	1.69	1.31	1.14	0.77	0.63	0.34
	W	227	163	113	83.5	42.9	26.3	19.9	15.4	13.4	9.09	7.45	4.06
11.10V	A	18.7	13.3	9.10	7.00	3.56	2.19	1.60	1.28	1.09	0.75	0.61	0.33
	W	212	154	106	81.9	41.8	25.9	19.1	15.3	13.0	8.94	7.39	4.03

Note: The above characteristics data can be obtained within three charge or discharge cycles.

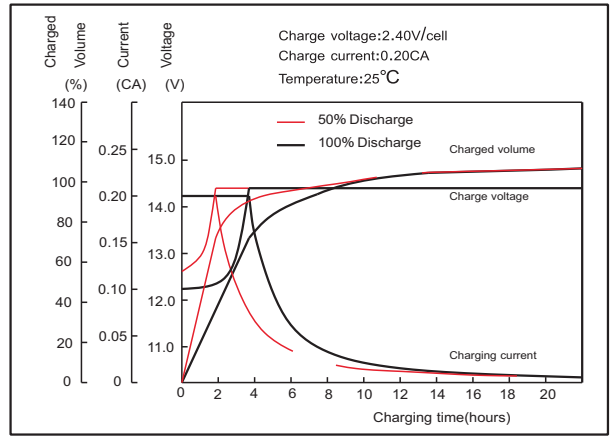
### Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper / lead

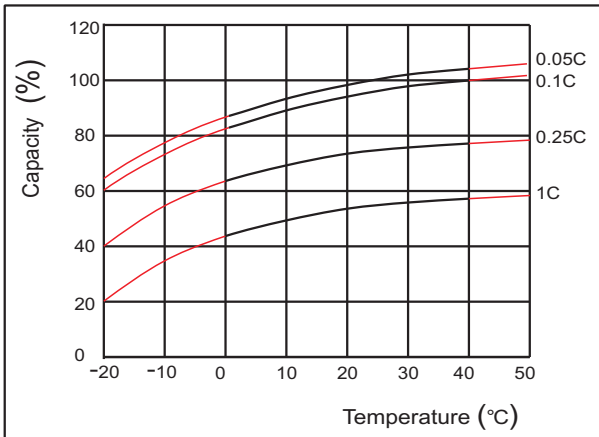
● Discharge characteristics(25°C)



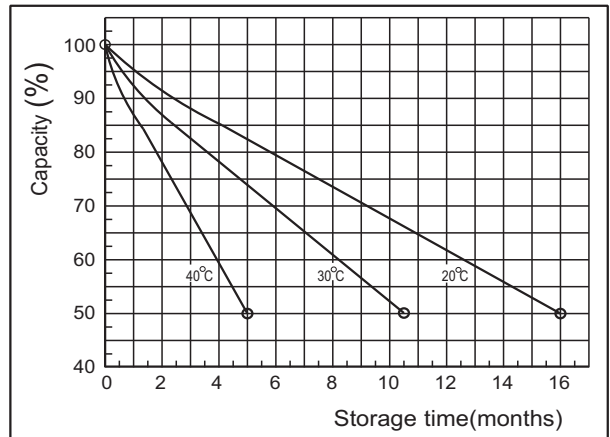
● Charging characteristics



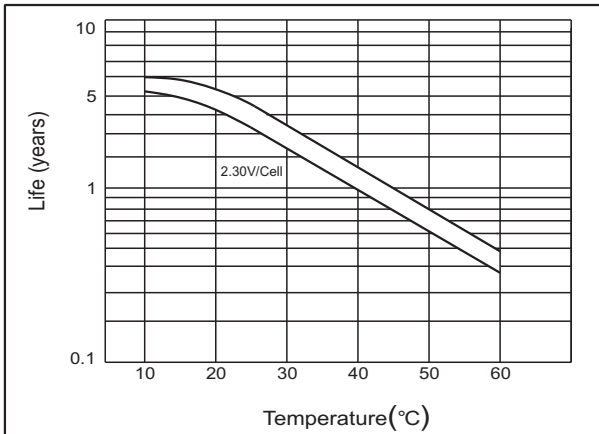
● Temperature effects on Capacity



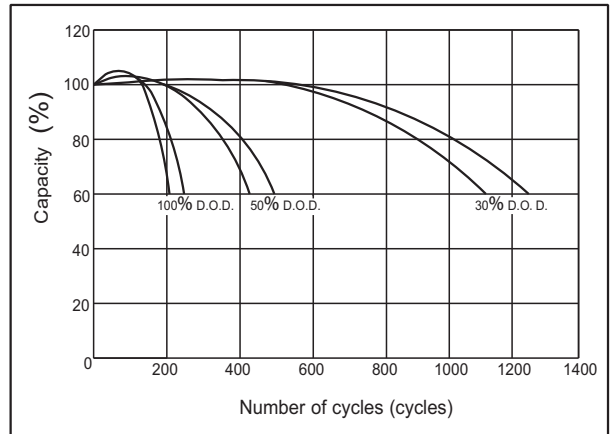
● Self-discharge characteristic



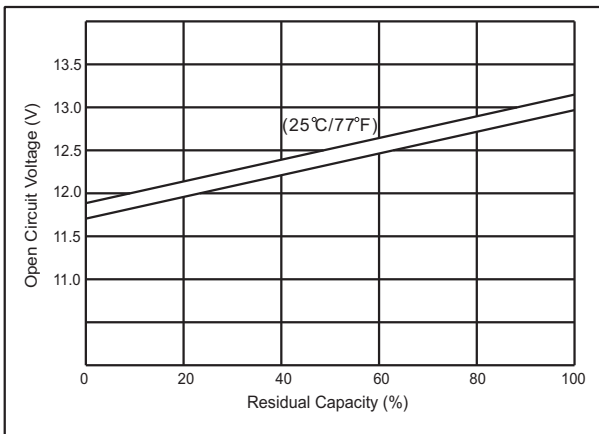
● Temperature effects on float life



● Cycle service life in relation to depth of discharge



● The relationship for OCV and Capacity (25°C)



● The relationship for Charging voltage and Temperature

