

Specifications

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	90 Ah
	5HR(10.2V)	70 Ah
	1HR(9.6V)	52.4Ah
Dimension	Length	306mm ± 2 (12.05inch)
	Width	169mm ± 2 (6.65inch)
	Height	214mm ± 2 (8.43inch)
	Total Height	214mm ± 2 (8.43inch)
Approx. Weight		28.5kg (62.7lbs) ± 4%
Terminal type		T9
Internal resistance (Fully charged, 25°C)		Approx. 5.8m Ω
Capacity affected by temperature (10HR)	40°C	103%
	25°C	100%
	0°C	88%
	-15°C	70%
Self-discharge (25°C)	3 month	Remaining Capacity: 94%
	6 month	Remaining Capacity: 88%
	12 month	Remaining Capacity: 75%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 55°C (5°F ~ 131°F)
	Charge	-10°C ~ 55°C (14°F ~ 131°F)
	Storage	-20°C ~ 55°C (-4°F ~ 131°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.10 to 14.40V Temperature compensation: -30mV/°C
Maximum charging current		18 A
Terminal material		Copper
Maximum discharge current		900A(5 sec.)
Designed floating life(20°C)		15 years

- ◆ Gelled electrolyte technology;
- ◆ PVC separator;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

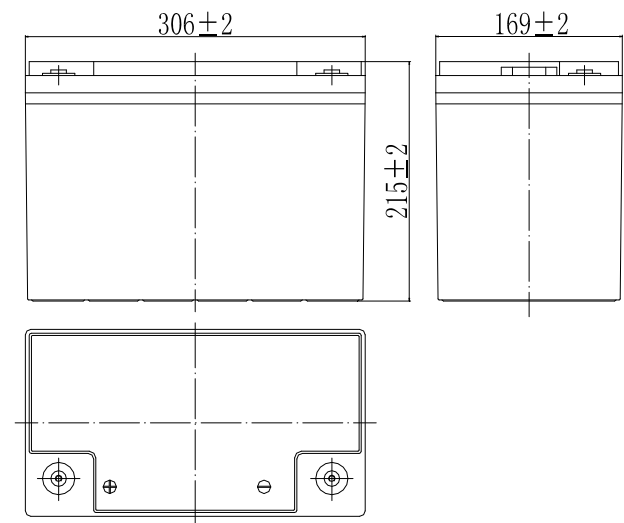
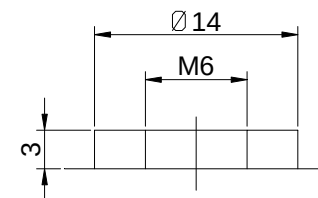
Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	122	83.9	52.4	30.6	21.6	17.0	14.2	12.2	9.45	8.43	4.60	---	---
9.90V	119	82.2	51.6	30.4	21.4	16.9	14.1	12.1	9.36	8.42	4.59	----	---
10.2V	114	79.7	50.3	30.2	21.3	16.7	14.0	12.0	9.36	8.39	4.58	2.01	---
10.5V	111	77.8	49.3	29.7	21.2	16.7	14.0	11.9	9.27	8.33	4.50	2.00	0.83
10.8V	104	74.9	47.8	29.0	20.5	16.1	13.5	11.5	8.99	8.28	4.50	2.00	0.83

Constant Power Discharge Characteristics (Watt, 25°C)

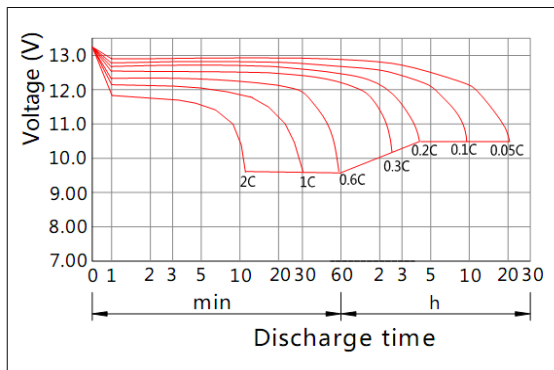
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	1356	956	603	356	255	201	169	144	113	101	55.4	---	---
9.90V	1323	937	594	354	254	200	168	143	113	101	55.4	----	---
10.2V	1274	908	580	351	252	198	167	142	112	101	55.2	24.1	---
10.5V	1231	887	568	346	250	197	166	141	111	99.9	54.3	23.9	9.99
10.8V	1166	854	550	337	242	191	161	137	107	99.0	54.5	23.9	9.90

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

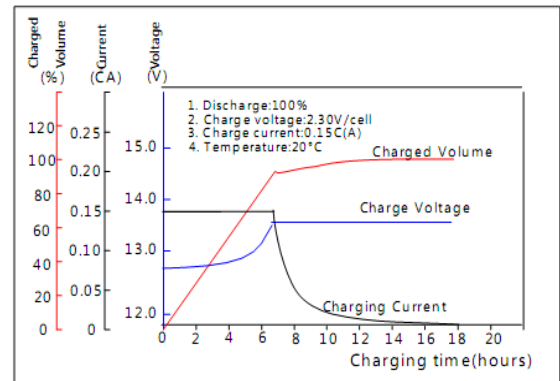
Dimensions**Terminal**

Terminal T9

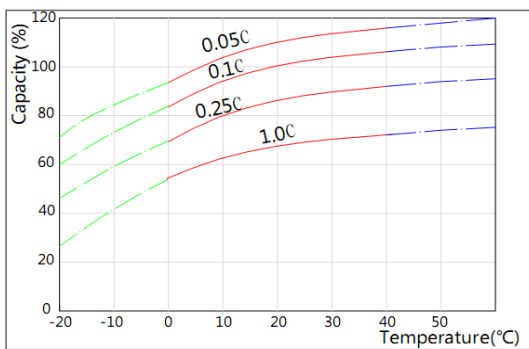
Discharge Characteristics(25°C)



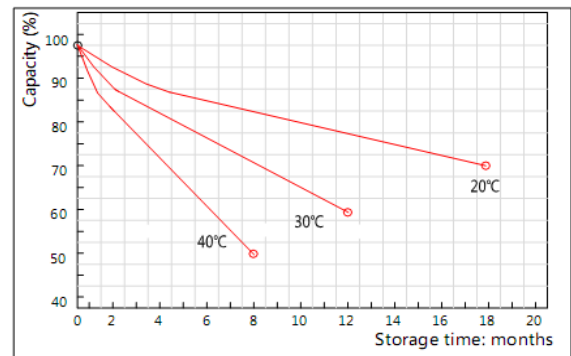
Charging Characteristics(25°C)



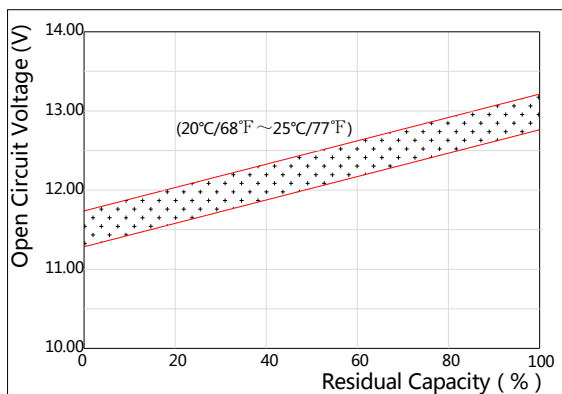
Effect of Temperature on Capacity



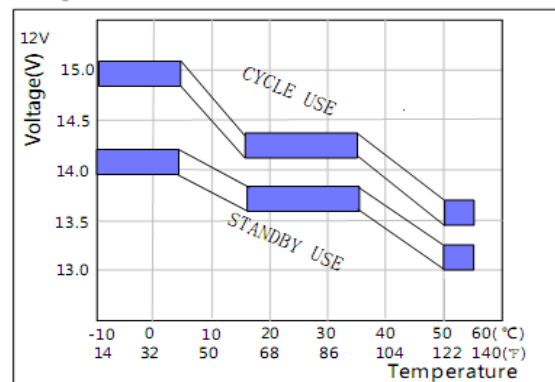
Self-discharge Characteristics



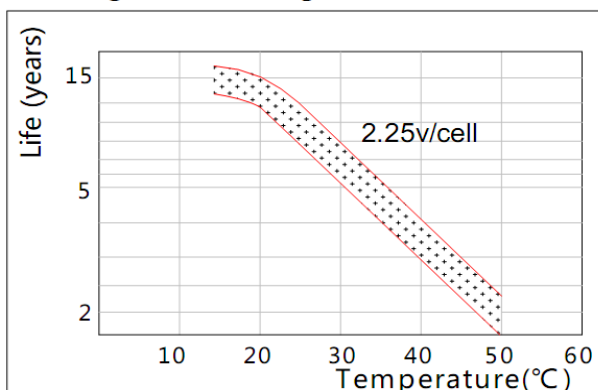
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D.(25°C)

