

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	12Ah
	5HR(10.5V)	10.3Ah
	1HR(9.60V)	7.9Ah
Dimension	Length	151 ± 1.5mm (5.94inch)
	Width	98 ± 1mm (3.86inch)
	Height	95 ± 1mm (3.74inch)
	Total Height	101 ± 1mm (3.98inch)
Approx. Weight		3.6kg (7.94lbs) ± 5%
Terminal type		T2/T1
Internal resistance (Fully charged, 25°C)		Approx. 19mΩ
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	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 14.90V Temperature compensation: -30mV/°C
Maximum charging current		3.6A
Terminal material		Copper
Maximum discharge current		180A(5 sec.)
Designed cycle life(25°C)		700 cycles@50% DOD

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ Designed suitable for deep cycle use;
- ◆ ABS container.

**Constant Current Discharge Characteristics (A, 25°C)**

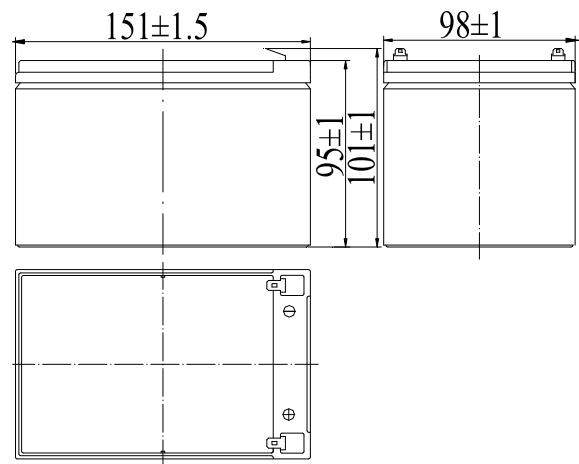
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	46.5	29.3	23.0	12.8	7.89	4.30	3.09	2.47	2.09	1.15	0.62
9.90V	45.1	28.5	22.5	12.6	7.77	4.27	3.07	2.45	2.09	1.13	0.61
10.2V	43.2	27.3	21.6	12.2	7.56	4.23	3.03	2.43	2.07	1.13	0.61
10.5V	41.3	26.2	20.9	11.9	7.41	4.17	3.02	2.42	2.06	1.11	0.60
10.8V	39.1	24.7	19.9	11.5	7.17	4.06	2.93	2.35	1.99	1.10	0.59

**Constant Power Discharge Characteristics (Watt, 25°C)**

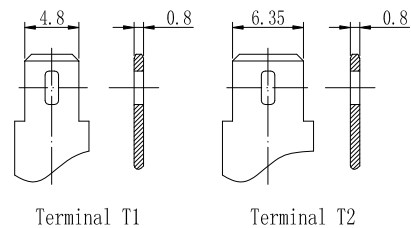
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	519	329	261	147	91.2	50.2	36.6	29.3	25.0	13.7	7.35
9.90V	504	321	255	144	89.8	49.9	36.4	29.1	24.9	13.6	7.34
10.2V	483	307	245	140	87.6	49.5	36.0	29.0	24.7	13.6	7.30
10.5V	463	295	238	137	85.9	48.7	35.8	28.8	24.5	13.5	7.23
10.8V	439	278	226	131	83.1	47.5	35.0	27.9	23.8	13.2	7.13

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

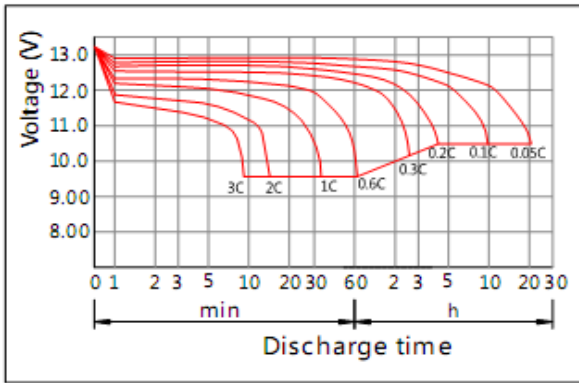
**Dimensions**



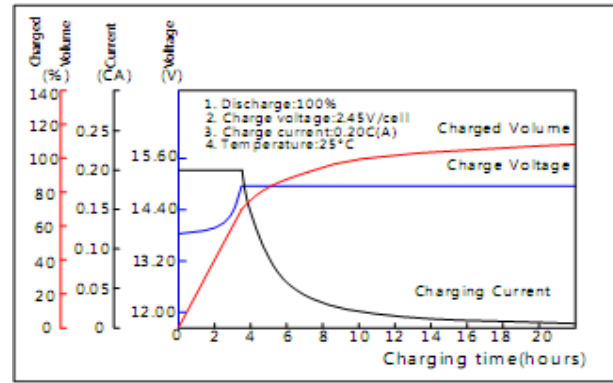
**Terminal**



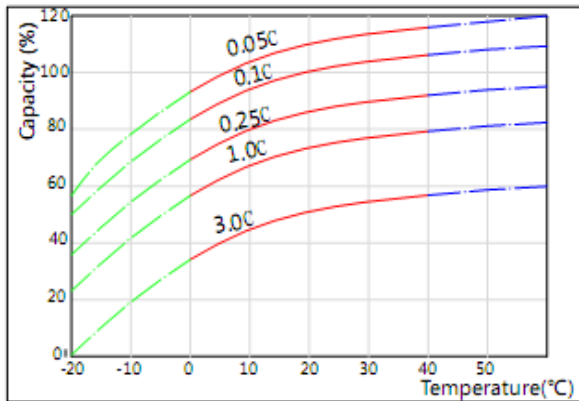
Discharge Characteristics(25°C)



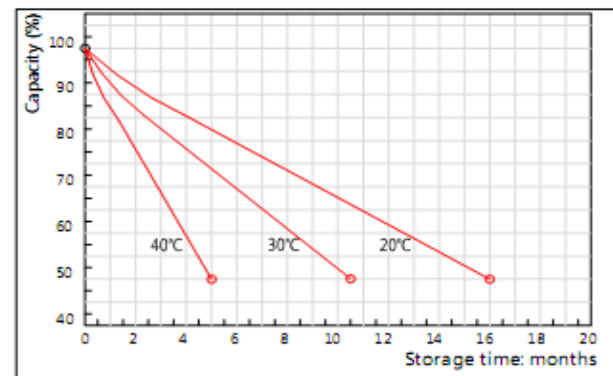
Charging Characteristics(25°C)



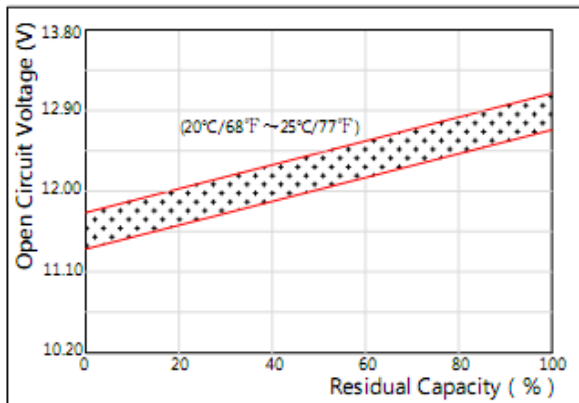
Effect of Temperature on Capacity



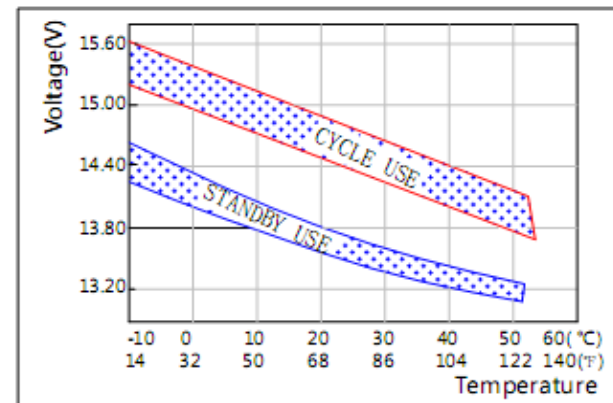
Self-discharge Characteristics



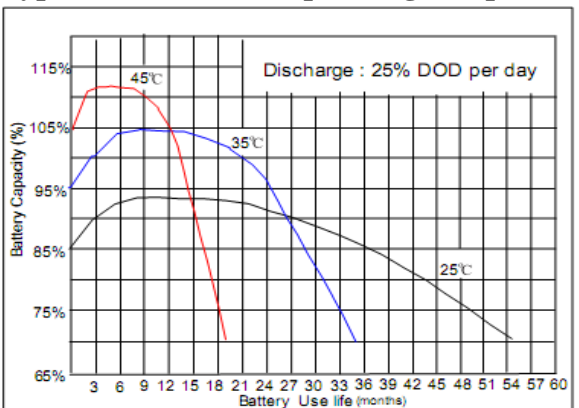
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Typical Use life and Operating Temperature



Cycle Life on D.O.D(25°C)

