

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	60Ah
	5HR(10.2V)	46.8Ah
	1HR(9.6V)	34.9 Ah
Dimension	Length	350 ± 2mm (13.78inch)
	Width	167 ± 2mm (6.57inch)
	Height	179 ± 2mm (7.05inch)
	Total Height	179 ± 2mm (7.05inch)
Approx. Weight		21kg (46.2lbs) ± 4%
Terminal type		T9
Internal resistance (Fully charged, 25°C)		Approx. 7.7m 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		12.0A
Terminal material		Copper
Maximum discharge current		600A(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	81.0	55.9	34.9	20.4	14.4	11.3	9.48	8.10	6.30	5.62	3.07	---	---
9.90V	79.2	54.8	34.4	20.3	14.3	11.3	9.42	8.04	6.24	5.61	3.06	----	---
10.2V	76.2	53.1	33.5	20.1	14.2	11.2	9.36	7.98	6.24	5.59	3.05	1.34	---
10.5V	73.8	51.8	32.9	19.8	14.1	11.1	9.30	7.92	6.18	5.56	3.00	1.33	0.55
10.8V	69.6	49.9	31.9	19.3	13.7	10.7	9.00	7.68	5.99	5.52	3.00	1.33	0.55

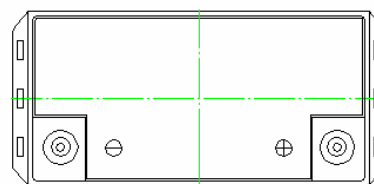
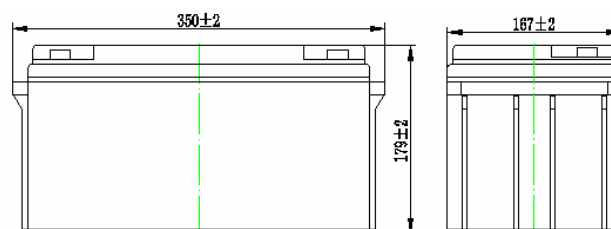
**Constant Power Discharge Characteristics (Watt, 25°C)**

F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	48h	120h
9.60V	904	637	402	238	170	134	113	96.0	75.0	67.2	37.0	---	---
9.90V	882	625	396	236	169	133	112	95.4	75.0	67.2	36.9	----	---
10.2V	850	605	386	234	168	132	111	94.8	74.4	67.2	36.8	16.1	---
10.5V	821	591	379	230	167	131	110	94.2	73.8	66.6	36.2	16.0	6.66
10.8V	778	569	367	224	161	127	107	91.2	71.4	66.0	36.3	16.0	6.60

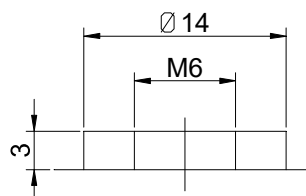
Note: The above characteristics data can be obtained within three charge/discharge cycles.



**Dimensions**

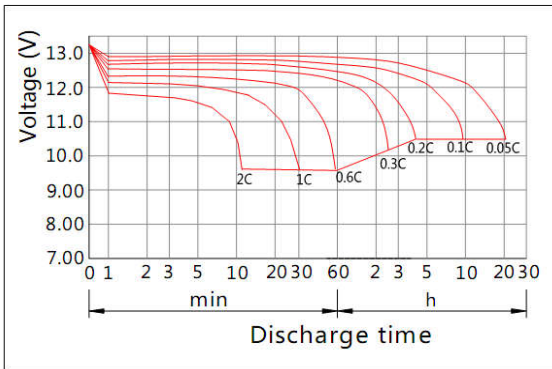


**Terminal**

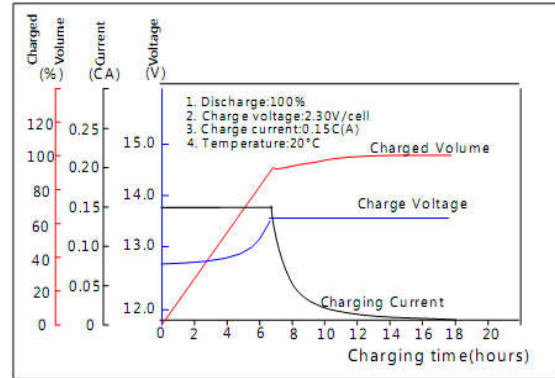


Terminal T9

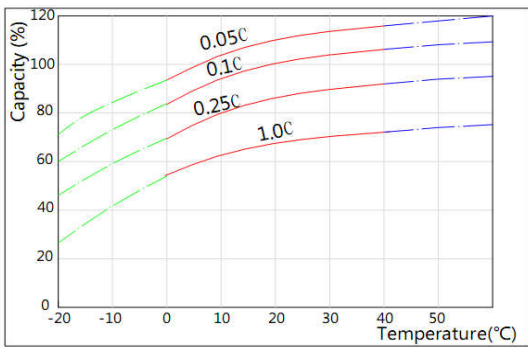
**Discharge Characteristics(25°C)**



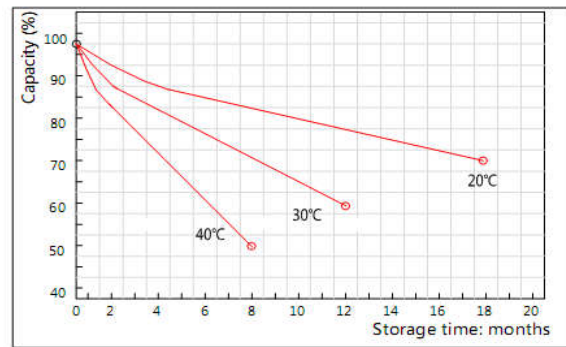
**Charging Characteristics(25°C)**



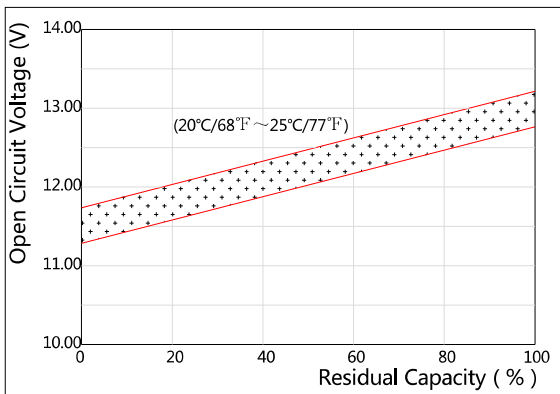
**Effect of Temperature on Capacity**



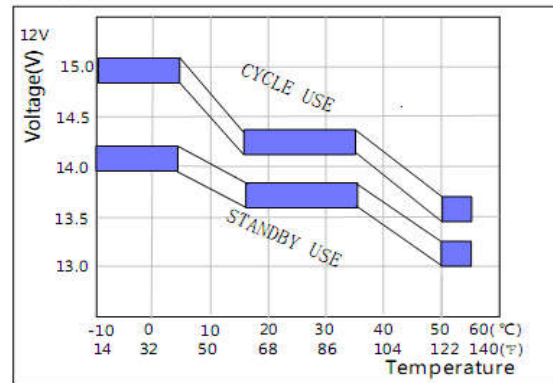
**Self-discharge Characteristics**



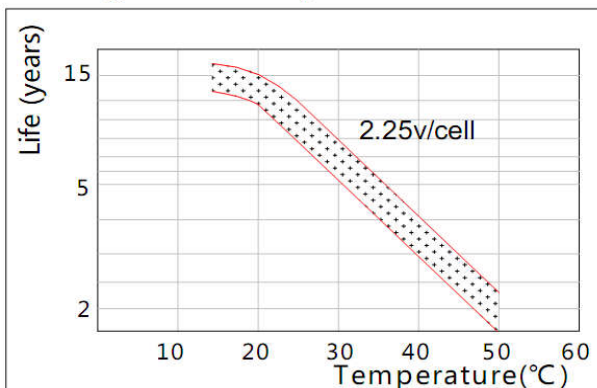
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D.(25°C)**

