

Specifications

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	12Ah
	10HR(10.5V)	11Ah
	1HR(9.60V)	7.88Ah
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 floating life(20°C)		3~5 years

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

Constant Current Discharge Characteristics (A, 25°C)

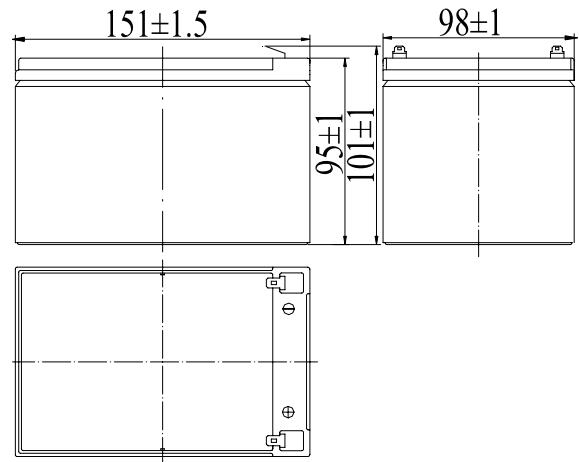
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	29.4	23.0	12.8	7.88	4.26	3.06	2.45	2.08	1.35	1.13	0.61
9.90V	28.5	22.5	12.6	7.76	4.24	3.04	2.43	2.07	1.34	1.13	0.61
10.2V	27.3	21.6	12.2	7.56	4.20	3.02	2.42	2.05	1.33	1.12	0.60
10.5V	26.1	20.9	11.9	7.41	4.14	3.00	2.40	2.04	1.32	1.12	0.60
10.8V	24.7	19.8	11.5	7.18	4.03	2.91	2.33	1.98	1.28	1.09	0.59

Constant Power Discharge Characteristics (Watt, 25°C)

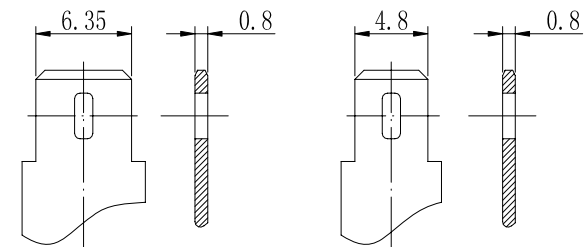
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	331	263	147	91.2	49.9	36.4	29.2	24.8	16.2	13.6	7.31
9.90V	321	256	144	89.9	49.6	36.1	29.0	24.7	16.1	13.5	7.28
10.2V	308	247	140	87.6	49.1	35.9	28.8	24.5	16.0	13.5	7.24
10.5V	295	238	136	85.8	48.4	35.6	28.6	24.4	15.8	13.4	7.20
10.8V	278	226	131	83.2	47.2	34.6	27.7	23.6	15.4	13.1	7.06

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

Dimensions



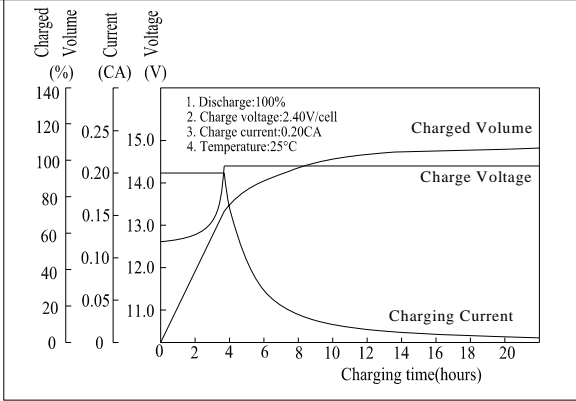
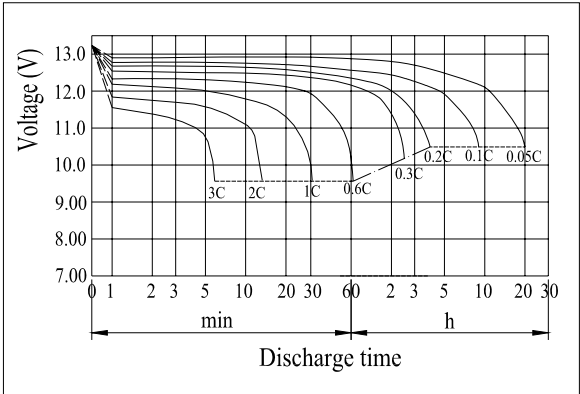
Terminal



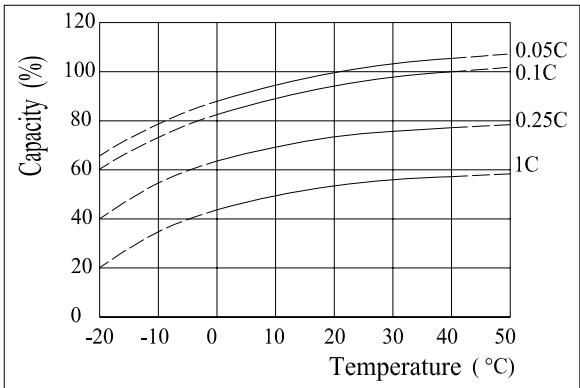
Terminal T2

Terminal T1

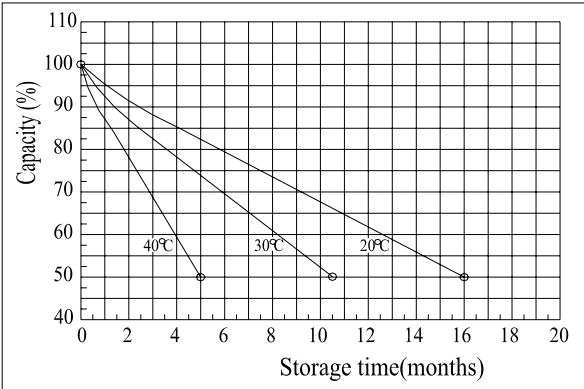
Discharge Characteristics(25°C)



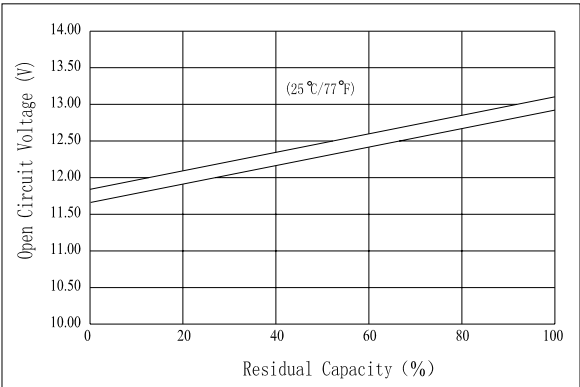
Effect of Temperature on Capacity



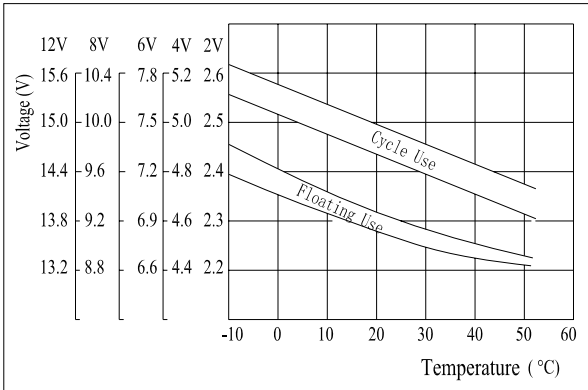
Self-discharge Characteristics



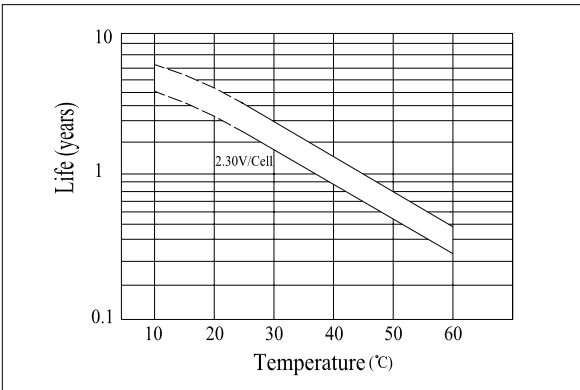
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



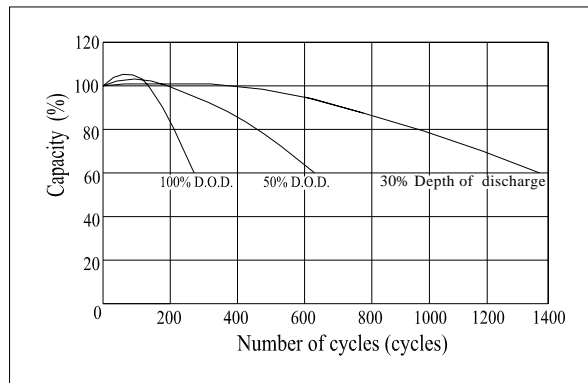
The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)



Charging Characteristics(25°C)