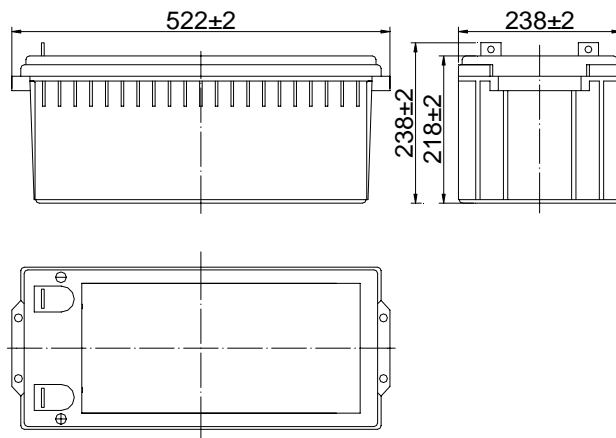


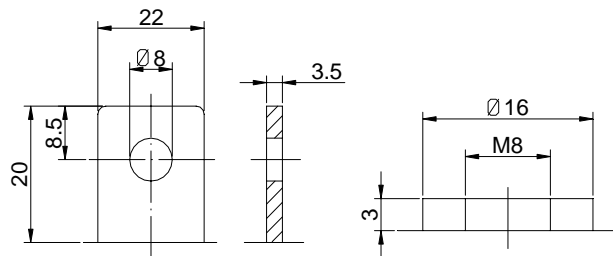
Specifications

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	220 Ah
	10HR(10.8V)	200Ah
	1HR(9.60V)	115Ah
Dimension	Length	522 ± 2mm (20.55inch)
	Width	238 ± 2mm (9.37inch)
	Height	218 ± 2mm (8.58inch)
	Total Height	T5: 238 ± 2mm (9.37inch) T11: 221 ± 2mm (8.70inch)
Approx. Weight		61.5kg (135.6lbs) ± 3%
Terminal type		T5/T11
Internal resistance (Fully charged, 25°C)		Approx. 3m Ω
Capacity affected by temperature (10HR)	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)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.40 to 14.70V Temperature compensation: -30mV/°C
Maximum charging current		60A
Terminal material		Copper
Maximum discharge current		1600A(5 sec.)
Designed floating life(20°C)		8 years

Dimensions



Terminal



Terminal T5

Terminal T11

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

Constant Current Discharge Characteristics (A, 25°C)

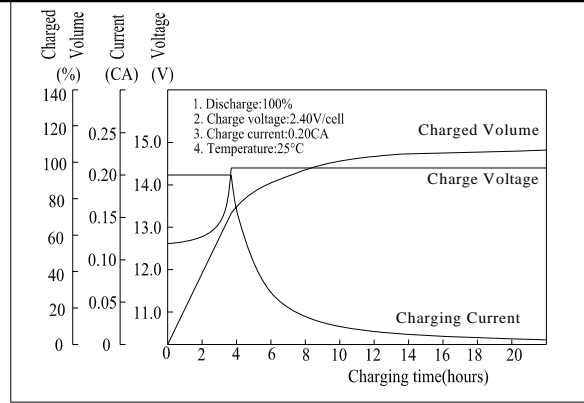
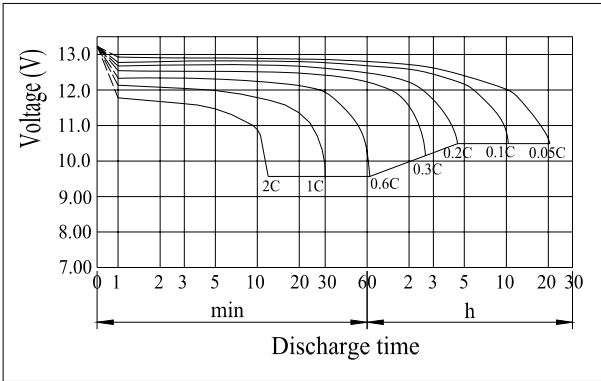
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	330	200	124	73.1	51.0	41.8	35.7	31.2	24.5	20.4	11.3
9.90V	322	196	122	72.6	50.7	41.6	35.5	31.0	24.3	20.3	11.2
10.2V	310	190	119	72.0	50.4	41.3	35.2	30.8	24.2	20.3	11.1
10.5V	300	185	117	70.9	50.0	41.0	35.0	30.6	24.0	20.1	11.0
10.8V	284	179	113	69.1	48.5	39.8	34.0	29.7	23.3	20.0	10.5

Constant Power Discharge Characteristics (Watt, 25°C)

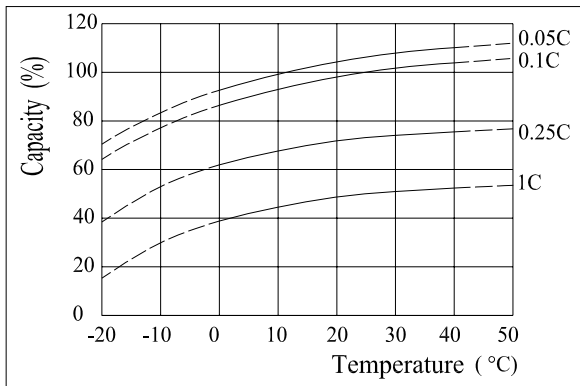
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	3623	2244	1414	846	600	492	422	369	291	243	135
9.90V	3536	2199	1392	841	596	489	419	367	289	243	134
10.2V	3406	2132	1357	834	592	486	417	364	287	242	133
10.5V	3290	2080	1330	821	588	482	414	362	285	240	132
10.8V	3116	2004	1289	800	570	468	401	351	277	239	126

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

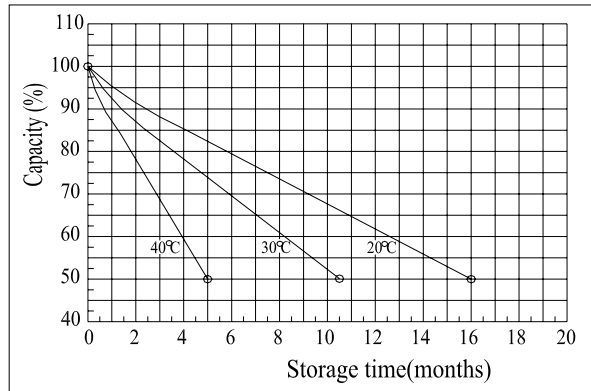
Discharge Characteristics(25°C)



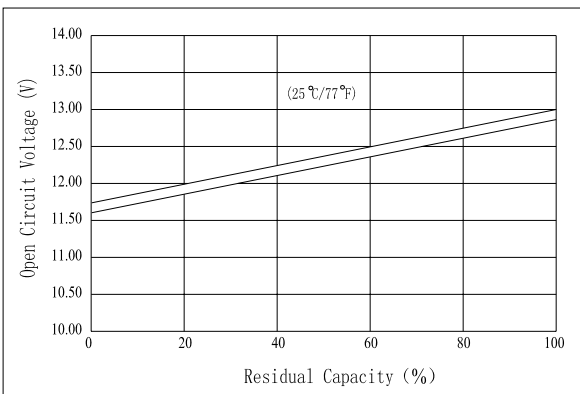
Effect of Temperature on Capacity



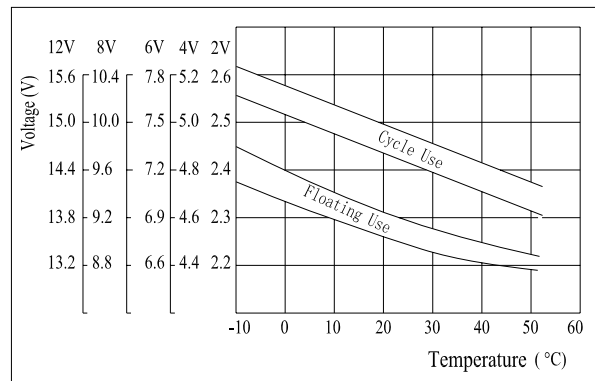
Self-discharge Characteristics



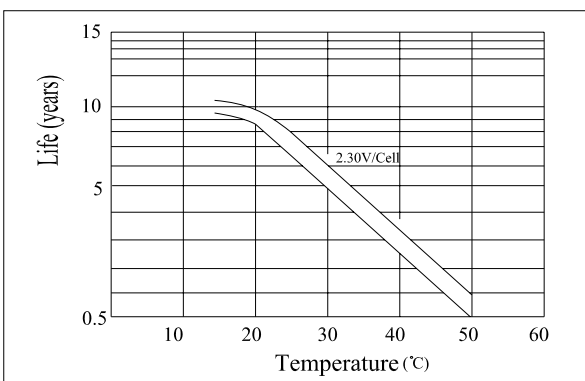
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



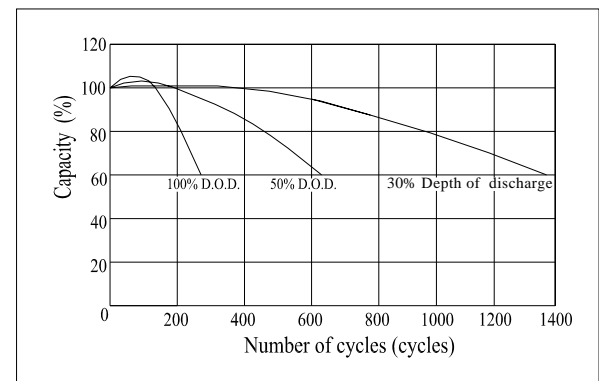
The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)



Charging Characteristics(25°C)