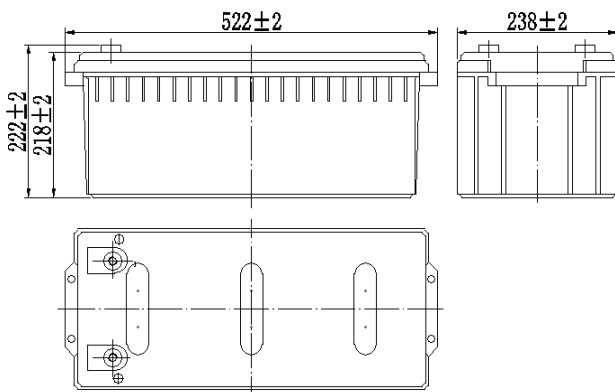


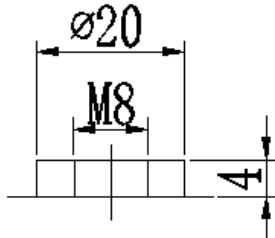
Specifications

Nominal Voltage		12 V
Rated capacity(20HR)		230Ah
Dimension	Length	522±2mm (20.55inch)
	Width	238±2mm (9.37inch)
	Height	218±2mm (8.58inch)
	Total Height	222±2mm (8.74inch)
Approx. Weight		65.5kg (1444bs)±3%

Dimensions



Terminal



Characteristics

Capacity (25°C)	20HR(10.5V)	230Ah
	10HR(10.8V)	210Ah
	1HR(10.5V)	120Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 2.6mΩ
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)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		67.5A
Terminal material		Copper
Maximum discharge current		1400A(5 sec.)
Designed floating life(20°C)		10 years

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

Constant Current Discharge Characteristics (A, 25°C)

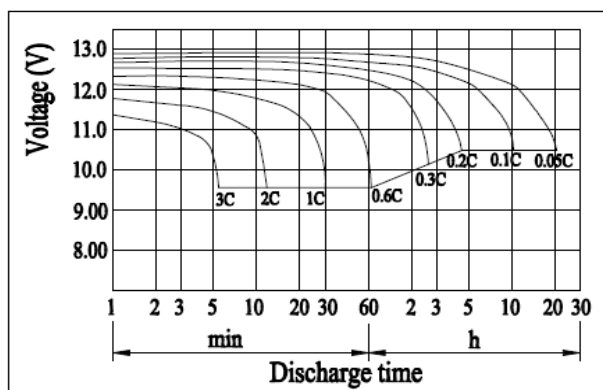
F.V/TIME	10min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	568	213	131	77.5	55.8	44.5	38.1	26.2	21.6	11.4
9.90V	551	209	129	77.0	55.5	44.3	37.8	26.0	21.5	11.4
10.2V	528	202	126	76.3	55.1	44.0	37.6	25.8	21.5	11.4
10.5V	505	198	122	75.2	54.7	43.7	37.3	25.7	21.3	11.5
10.8V	477	190	118	73.3	53.1	42.4	36.2	24.9	21.2	11.2

Constant Power Discharge Characteristics (Watt, 25°C)

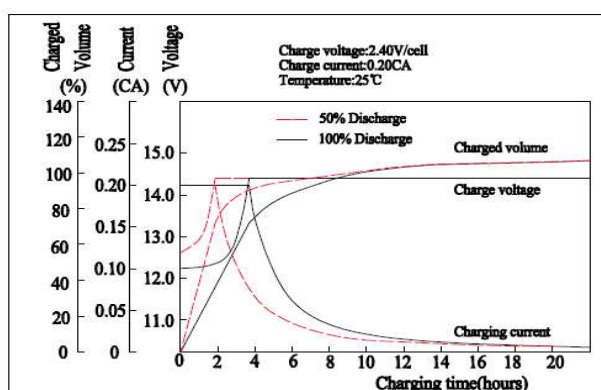
F.V/TIME	10min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	5531	2391	1494	897	656	524	450	311	258	137
9.90V	5522	2343	1471	892	652	521	447	309	257	137
10.2V	5517	2271	1434	884	648	517	444	307	256	137
10.5V	5493	2216	1389	871	643	514	441	305	255	136
10.8V	5483	2135	1344	848	624	498	428	296	253	135

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

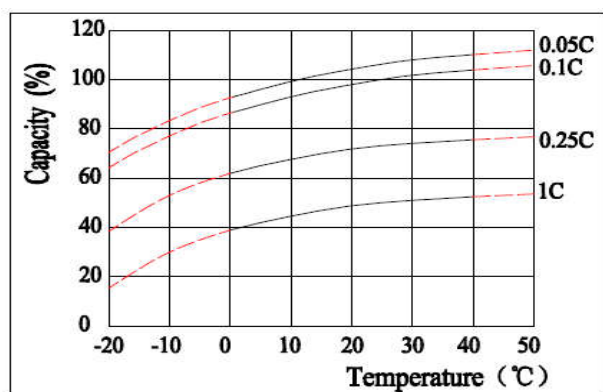
Discharge Characteristics(25°C)



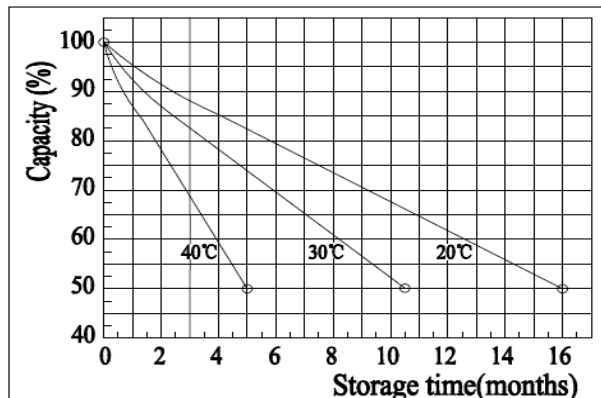
Charging Characteristics(25°C)



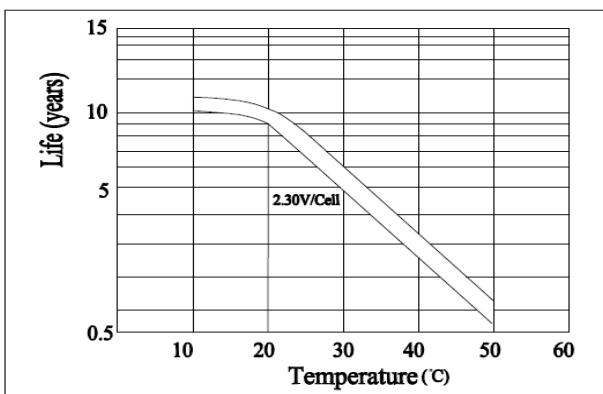
Effect of Temperature on Capacity



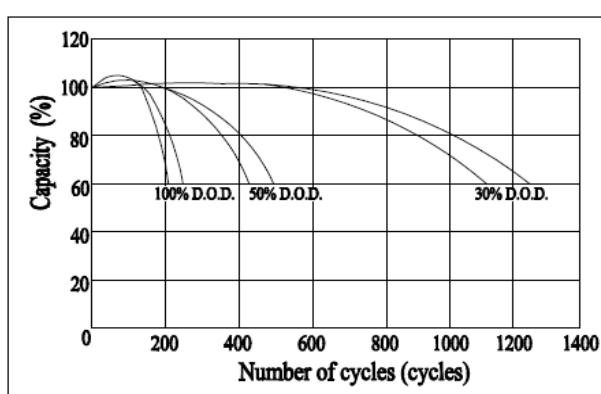
Self-discharge Characteristics



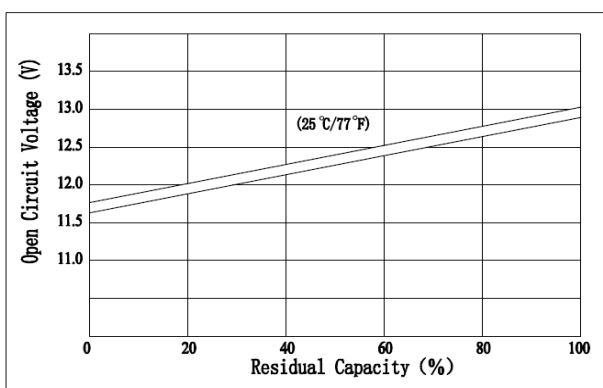
Floating Life on Temperature



Cycle Life on D.O.D(25°C)



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



The Relationship for Charging Voltage and Temperature

