

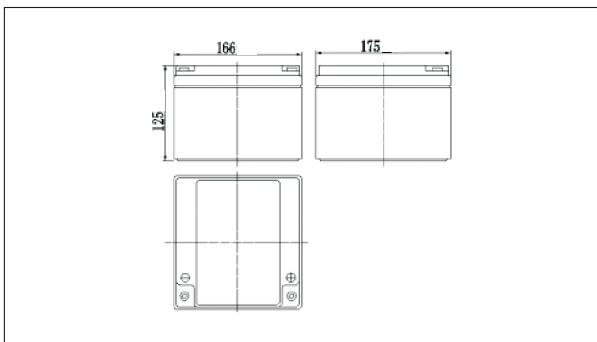
## HR12100W-FR (12V100 Watts/cell)



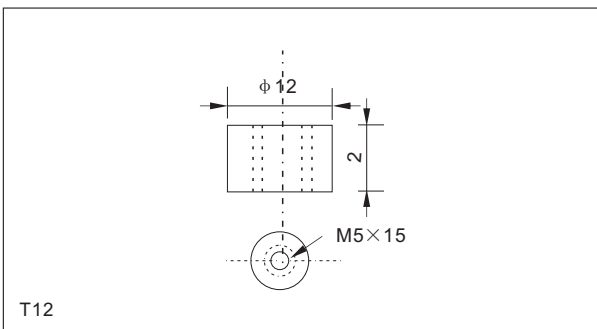
### ● Specifications

Nominal Voltage	12V	
Number of cell	6 cells	
Rated capacity(15min.rat)	100 Watts/cell	
Dimensions	Length	166±2mm(6.54inch)
	Width	175±2mm(6.89inch)
	Height	125±2mm(4.92inch)
	Total Height	125±2mm(4.92inch)
Approx. Weight	8.8kg(19.4lbs)±3%	

### ● Outer dimensions (mm)



### ● Terminal Type (mm)



### ● Characteristics

Capacity(20HR,25°C)	26Ah	
Capacity(15min.rate,25°C)	100 Watts/cell	
Terminal type	T12	
Internal resistance (Fully charged,25°C)	Approx.9m Ω	
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	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	7.8A	
Maximum discharge current	300A(5 sec.)	
Designed floating life(20°C)	10years	

### ● Construction

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

### ● Constant Current Discharge Characteristics Unit:A(25°C,77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h
1.60V/cell	108	66.8	52.5	41.5	28.1	20.8	17.0	9.55	6.79	5.46	4.69
1.67V/cell	104	63.8	50.6	39.8	27.2	20.2	16.6	9.47	6.73	5.41	4.65
1.70V/cell	101	62.1	49.3	39.0	26.7	19.8	16.4	9.41	6.70	5.39	4.63
1.75V/cell	96.5	59.4	47.6	37.7	26.1	19.3	16.0	9.27	6.66	5.36	4.60
1.80V/cell	91.1	56.1	45.1	35.7	25.1	18.6	15.5	9.04	6.46	5.20	4.46

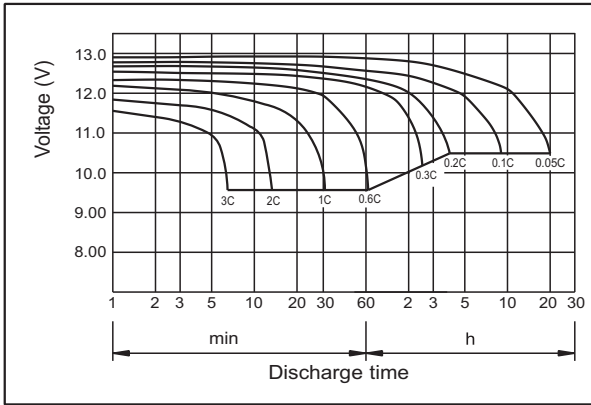
### ● Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h
1.60V/cell	208	130	104	82.2	55.7	41.2	33.7	19.0	13.6	11.0	9.44
1.67V/cell	199	124	100	78.9	53.9	39.9	32.9	18.8	13.5	10.9	9.35
1.70V/cell	194	121	97.6	77.3	52.9	39.2	32.4	18.7	13.5	10.8	9.31
1.75V/cell	185	115	94.3	74.6	51.6	38.2	31.7	18.4	13.4	10.8	9.25
1.80V/cell	175	109	89.3	70.7	49.7	36.8	30.8	18.0	13.0	10.4	8.97

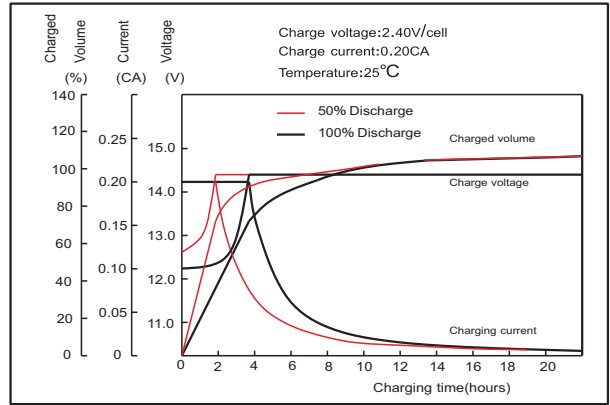
Note: The above characteristics data can be obtained within three charge or discharge cycles.

**HR12100W-FR (12V100 Watts/cell)**

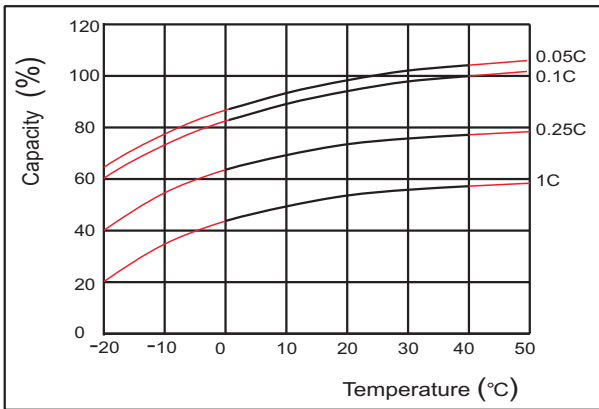
**Discharge characteristics(25°C)**



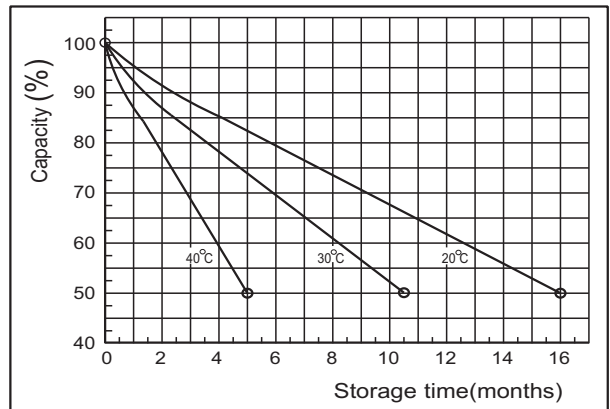
**Charging characteristics (25°C)**



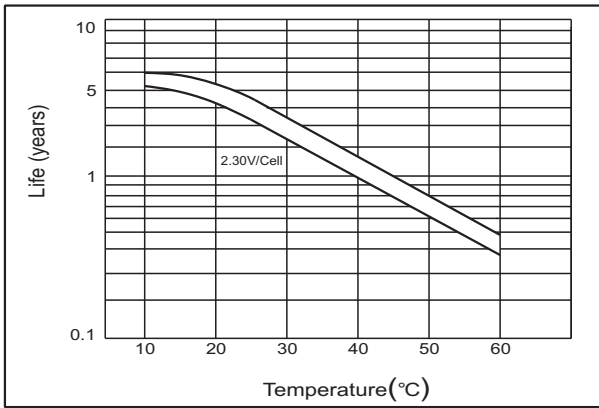
**Effect of Temperature on Capacity**



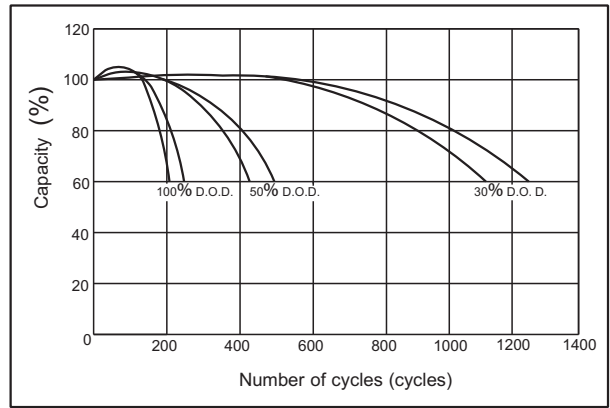
**Self-discharge characteristics**



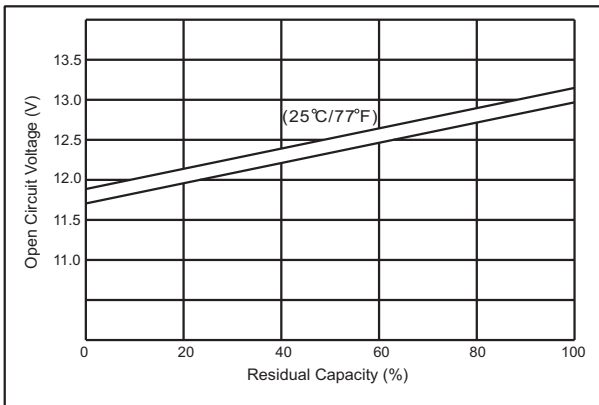
**Floating Life on Temperature**



**Cycle service Life on D.O.D (25°C)**



**The relationship for OCV and Capacity (25°C)**



**The relationship for Charging voltage and Temperature**

