

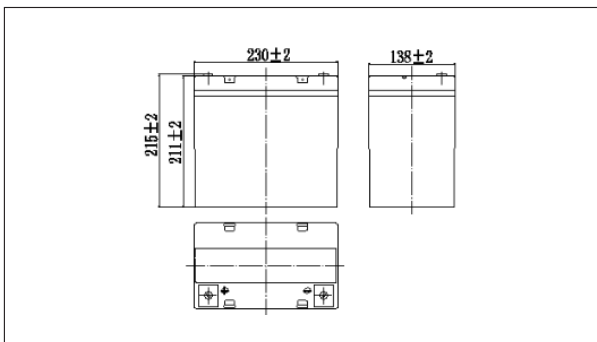
## HR12200W-FR (12V200 Watts/cell)



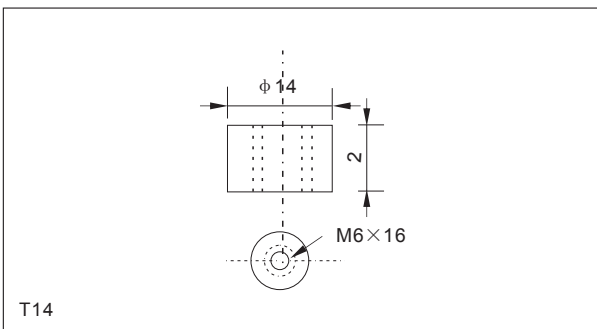
### Specifications

Nominal Voltage	12V	
Number of cell	6 cells	
Rated capacity(15min.rat)	200 Watts/cell	
Dimensions	Length	230±2mm(9.06inch)
	Width	138±2mm(5.43inch)
	Height	211±2mm(8.31inch)
	Total Height	215±2mm(8.46inch)
Approx.Weight	17.3kg(38.1lbs)±3%	

### Outer dimensions (mm)



### Terminal Type (mm)



### Characteristics

Capacity(10HR,25°C)	55Ah	
Capacity(15min.rate,25°C)	200 Watts/cell	
Terminal type	T14	
Internal resistance (Fully charged,25°C)	Approx.6.5m 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	16.5A	
Maximum discharge current	550A(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	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	131	107	85.5	60.6	45.1	36.8	20.1	14.4	11.6	10.1	8.64
1.67V/cell	125	104	82.1	58.6	43.7	35.9	19.9	14.3	11.5	10.0	8.56
1.70V/cell	122	101	80.4	57.6	42.9	35.4	19.8	14.2	11.5	9.97	8.53
1.75V/cell	116	97.1	77.7	56.2	41.8	34.7	19.5	14.1	11.4	9.90	8.47
1.80V/cell	110	92.0	73.6	54.1	40.3	33.6	19.0	13.7	11.0	9.60	8.22

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

F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	246	206	165	117	87.1	71.1	39.2	28.4	22.9	20.0	17.1
1.67V/cell	235	200	158	113	84.3	69.3	38.8	28.2	22.7	19.8	17.0
1.70V/cell	228	194	155	111	82.8	68.2	38.6	28.0	22.6	19.7	16.9
1.75V/cell	219	187	150	108	80.8	66.9	38.0	27.8	22.4	19.6	16.8
1.80V/cell	206	177	142	104	77.8	64.8	37.1	27.0	21.8	19.0	16.3

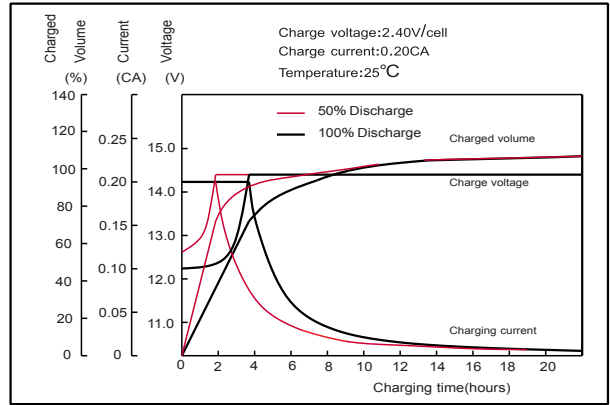
Note: The above characteristics data can be obtained within three charge or discharge cycles.

**HR12200W-FR (12V200 Watts/cell)**

**Discharge characteristics(25°C)**



**Charging characteristics (25°C)**



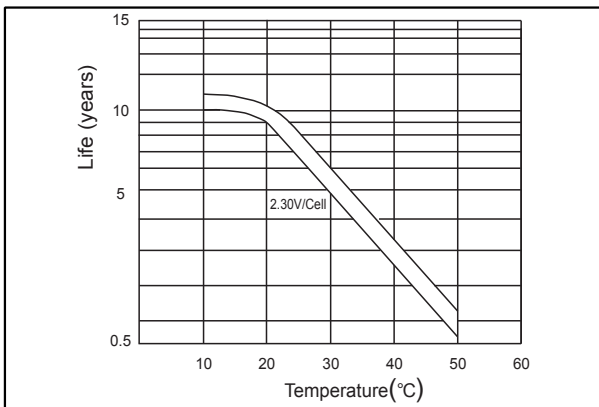
**Effect of Temperature on Capacity**



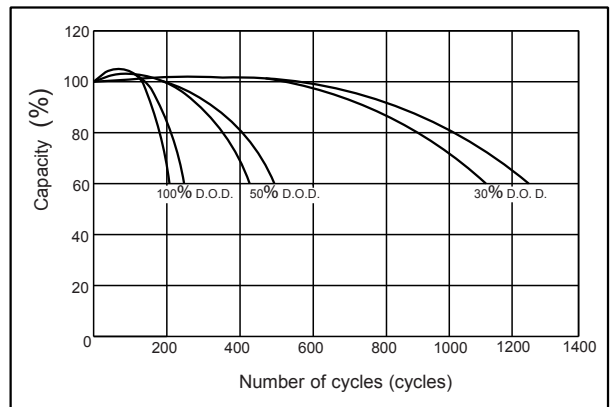
**Self-discharge characteristics**



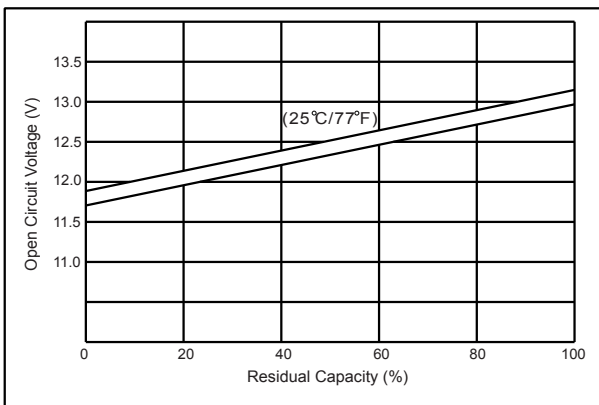
**Floating Life on Temperature**



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



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



**The relationship for Charging voltage and Temperature**

