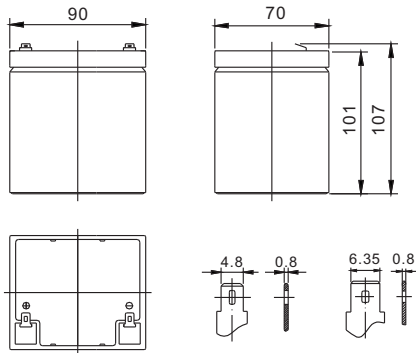


# High Rate Series FP1245HR (12V19Watts/cell@15min.Rate)

**FirstPower®**

## Dimension(mm)



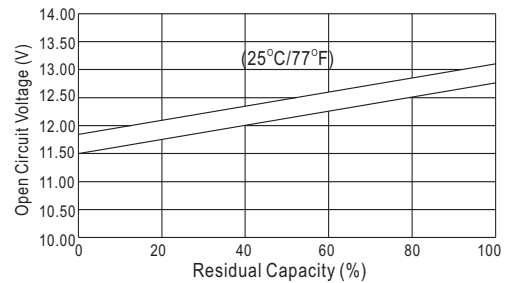
T1 T2  
Terminal



## Specification

Nominal Voltage		12 V
Capacity(20HR, 25°C)		4.5Ah(19Watts/cell@15min.Rate)
Dimension	Length	90mm (3.5inch)
	Width	70mm (2.8inch)
	Height	101mm (4.0inch)
	Total Height(T1/T2)	107mm (4.2inch)
Approx. Weight		1.65kg (3.64lbs)

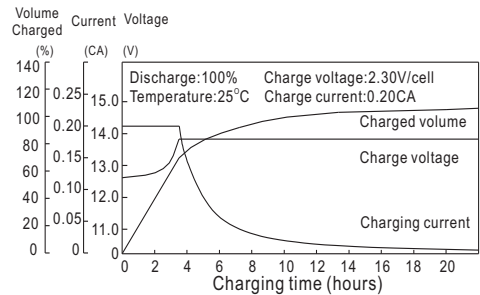
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



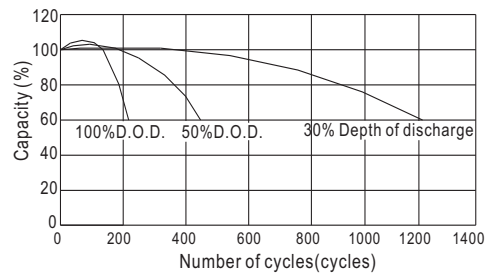
## Characteristics

Capacity 20°C (68°F) To 1.70V/Cell	20 hour rate	4.5Ah
	10 hour rate	4.3Ah
	5 hour rate	4.0Ah
	1 hour rate	3.16Ah
	15 min rate	2.42Ah
Internal resistance(Fully charged, 25°C)		Approx. 33mΩ
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		-15°C ~50°C (5°F ~122°F)
Float charging voltage(25°C)		13.50 to 13.80V
Cyclic charging voltage(25°C)		14.50 to 14.90V
Maximum charging current		1.35A
Terminal material		Copper
Maximum discharge current		67.5A(5 sec.)

## Charging Characteristics(25°C)



## Cycle Life(25°C)



## Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	5min	10min	15min	30min	60min	3h	5h	10h	20h
1.60V/cell	20.9	13.3	10.1	5.74	3.29	1.16	0.80	0.43	0.23
1.67V/cell	20.2	12.9	9.82	5.60	3.21	1.15	0.79	0.43	0.23
1.70V/cell	19.8	12.6	9.67	5.51	3.16	1.15	0.79	0.43	0.23
1.80V/cell	18.6	11.9	9.19	5.24	3.00	1.12	0.77	0.42	0.23

## Constant Power Discharge Characteristics (Watt/Cell, 25°C)

5min	10min	15min	30min	60min	3h	5h	10h	20h
39.3	25.3	19.5	11.2	6.41	2.33	1.60	0.86	0.46
38.0	24.5	19.1	10.9	6.25	2.31	1.58	0.85	0.45
37.3	24.0	18.8	10.7	6.16	2.30	1.58	0.85	0.45
35.1	22.6	17.8	10.2	5.85	2.25	1.54	0.85	0.45