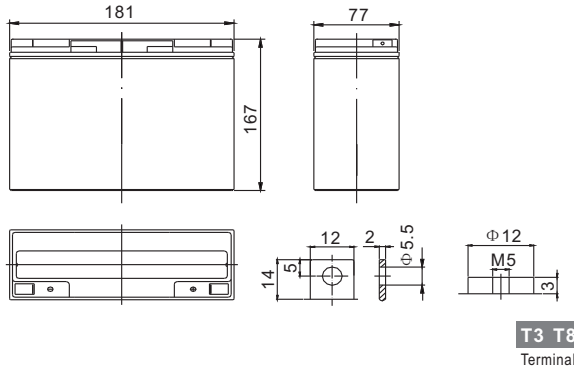


High Rate Series FP12200HR (12V82Watts/cell@15min.Rate)

FirstPower®

Dimension(mm)



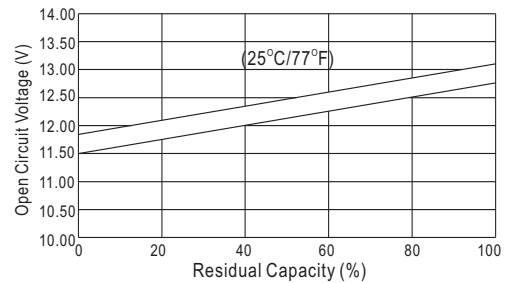
Specification

Nominal Voltage		12 V
Capacity(20HR, 25°C)		20Ah(82Watts/cell@15min.Rate)
Dimension	Length	181mm (7.1inch)
	Width	77mm (3.0inch)
	Height	166mm (6.5inch)
	Total Height	166mm (6.5inch)
Approx. Weight		6.4kg (14.1lbs)

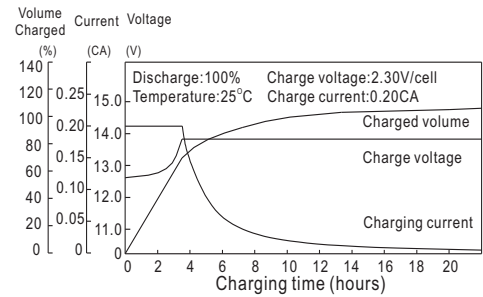
Characteristics

Capacity 20°C (68°F) To 1.70V/Cell	20 hour rate	20Ah
	10 hour rate	18.9Ah
	5 hour rate	17.5Ah
	1 hour rate	13.7Ah
	15 min rate	10.5Ah
Internal resistance(Fully charged, 25°C)		Approx. 14m Ω
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		6A
Terminal material		Copper
Maximum discharge current		300A(5 sec.)

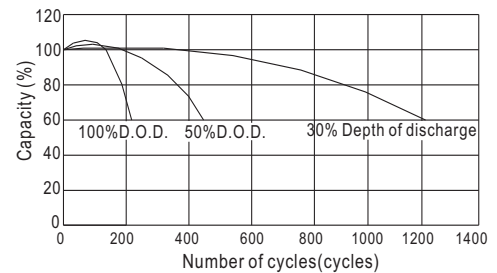
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



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	90.4	57.6	43.6	24.9	14.2	5.18	3.55	1.91	1.02
1.67V/cell	87.5	55.8	42.5	24.2	13.9	5.13	3.52	1.90	1.01
1.70V/cell	85.9	54.7	41.9	23.9	13.7	5.10	3.50	1.89	1.01
1.80V/cell	80.7	51.5	39.8	22.7	13.0	5.00	3.43	1.88	1.00

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

5min	10min	15min	30min	60min	3h	5h	10h	20h
170	109	84.6	48.5	27.8	10.4	7.11	3.82	2.03
165	106	82.5	47.3	27.1	10.3	7.04	3.79	2.02
161	104	81.2	46.5	26.7	10.2	7.00	3.78	2.01
152	97.8	77.2	44.2	25.3	10.0	6.86	3.78	2.00