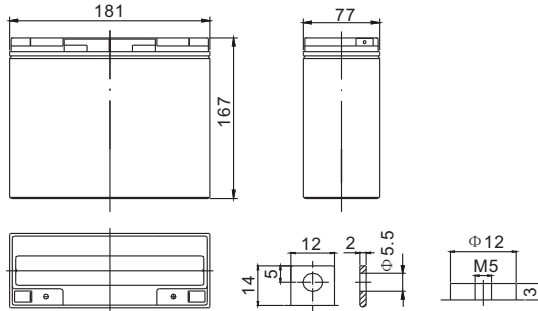


High Rate Series FP12180HR (12V76Watts/cell@15min.Rate)

FirstPower®

Dimension(mm)



T3 T8
Terminal



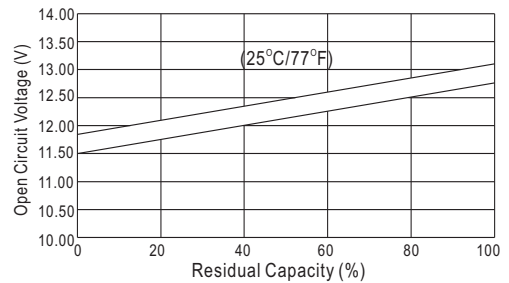
Specification

Nominal Voltage	12 V	
Capacity(20HR, 25°C)	18Ah(76Watts/cell@15min.Rate)	
Dimension	Length	181mm (7.1inch)
	Width	77mm (3.0inch)
	Height	167mm (6.6inch)
	Total Height(T3/T8)	167mm(6.6inch)/167mm(6.6inch)
Approx. Weight	5.8kg (12.8lbs)	

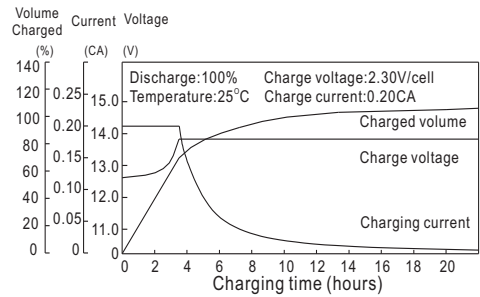
Characteristics

Capacity 20°C (68□) To 1.70V/Cell	20 hour rate	18Ah
	10 hour rate	17Ah
	5 hour rate	15.8Ah
	1 hour rate	12.6Ah
	15 min rate	9.7Ah
Internal resistance(Fully charged, 25°C)	Approx. 15mΩ	
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	5.4A	
Terminal material	Copper	
Maximum discharge current	270A(5 sec.)	

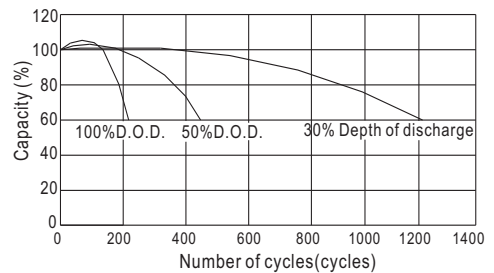
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



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	83.5	53.2	40.3	23.0	13.2	4.66	3.20	1.72	0.91
1.67V/cell	80.8	51.5	39.3	22.4	12.8	4.62	3.17	1.71	0.91
1.70V/cell	79.3	50.6	38.7	22.0	12.6	4.59	3.15	1.70	0.91
1.80V/cell	74.6	47.5	36.8	20.9	12.0	4.50	3.09	1.69	0.90

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

5min	10min	15min	30min	60min	3h	5h	10h	20h
157	101	78.2	44.8	25.7	9.32	6.39	3.43	1.83
152	97.9	76.2	43.7	25.0	9.24	6.34	3.41	1.82
149	96.1	75.1	43.0	24.6	9.18	6.30	3.40	1.81
140	90.3	71.3	40.8	23.4	9.00	6.17	3.40	1.80