



Specification

Nominal Voltage	12V	
Watts(15min Rate)	126.3 Watta at 1.67V/cell	
Dimension	Length	197±2mm (7.76 inches)
	Width	165±2mm (6.50 inches)
	Container Height	170±2mm (6.69 inches)
	Total Height (with Terminal)	170±2mm (6.69 inches)
Approx Weight	Approx 13.2 kg (29.1lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	38.7 AH/3.87A	(10hr , 1.80V/cell, 25°C/77°F)
	36.6 AH/4.58A	(8hr, 1.80V/cell, 25°C/77°F)
	32.8 AH/6.56A	(5hr, 1.75V/cell, 25°C/77°F)
	30.0 AH/9.99A	(3hr, 1.75V/cell, 25°C/77°F)
	25.3 AH/25.3A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	456A (5s)	
Internal Resistance	Approx 10mΩ	
Operating Temp. Range	Discharge	: -15~50°C (5~122°F)
	Charge	: 0~40°C (32~104°F)
	Storage	: -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 11.4A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	HP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- ◆ UPS (High rate)
- ◆ High power backup supply
- ◆ Emergency power supply
- ◆ Starting system
- ◆ Power tools
- ◆ Emergency lighting
- ◆ Electric starting

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	66.0	52.9	48.8	39.9	31.5	23.8	20.2	12.1	9.35	7.41	6.07	5.26	4.40	3.72	2.04
1.80V/cell	85.9	65.6	57.2	45.7	36.1	26.8	21.9	12.8	9.80	7.76	6.39	5.53	4.58	3.87	2.06
1.75V/cell	96.9	72.1	62.6	49.2	37.4	27.8	22.9	13.3	9.99	7.92	6.56	5.67	4.66	3.91	2.08
1.70V/cell	106.7	78.6	66.7	51.7	39.0	28.9	23.7	13.9	10.2	8.14	6.73	5.79	4.72	3.94	2.12
1.67V/cell	117.7	84.8	71.0	54.9	41.1	29.7	24.4	14.2	10.7	8.42	6.92	5.93	4.79	4.03	2.14
1.60V/cell	129.8	92.1	76.0	58.5	43.5	30.9	25.3	14.6	11.0	8.68	7.14	6.05	4.84	4.07	2.15

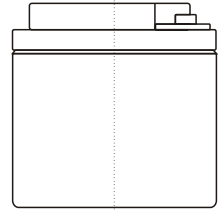
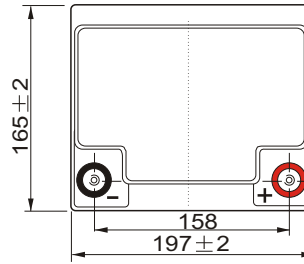
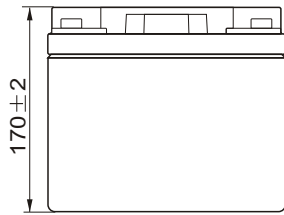
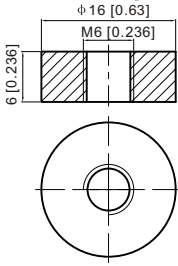
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	120.6	97.7	91.1	75.1	60.0	45.6	38.8	23.5	18.3	14.6	12.1	10.5	8.61	7.36	4.05
1.80V/cell	155.5	119.7	105.3	85.0	67.8	51.1	42.0	24.7	19.0	15.2	12.7	11.1	8.93	7.63	4.09
1.75V/cell	171.6	129.4	113.7	90.5	69.7	52.6	43.7	25.5	19.3	15.5	13.0	11.3	9.07	7.70	4.12
1.70V/cell	183.7	137.8	119.7	94.4	72.3	54.4	45.0	26.5	19.8	15.9	13.3	11.5	9.19	7.77	4.20
1.67V/cell	199.7	147.4	126.3	99.5	75.6	55.3	46.2	27.1	20.6	16.4	13.6	11.7	9.30	7.92	4.24
1.60V/cell	215.1	156.5	132.8	104.9	79.2	57.3	47.5	27.8	21.1	16.9	14.0	11.9	9.38	7.99	4.26

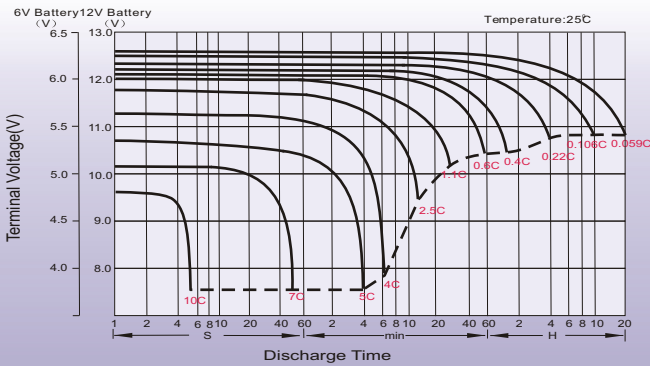
Dimensions

T6 Terminal

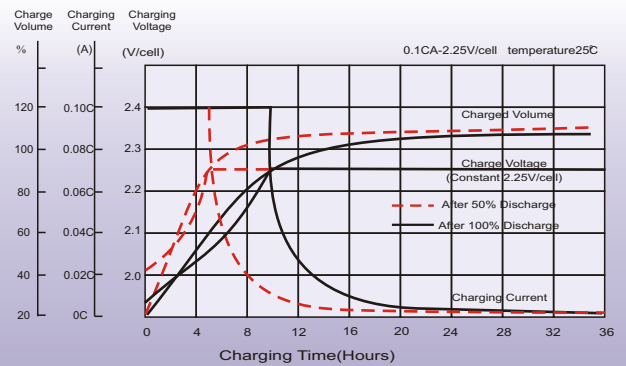
Unit: mm [inches]



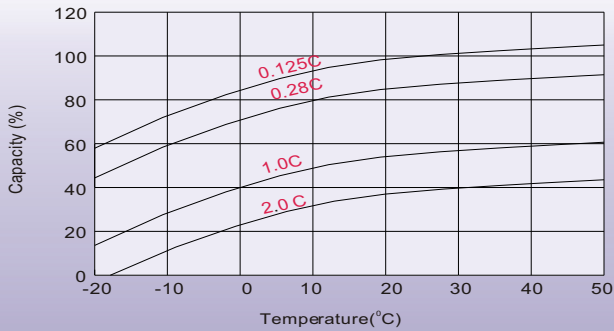
Discharge Characteristics



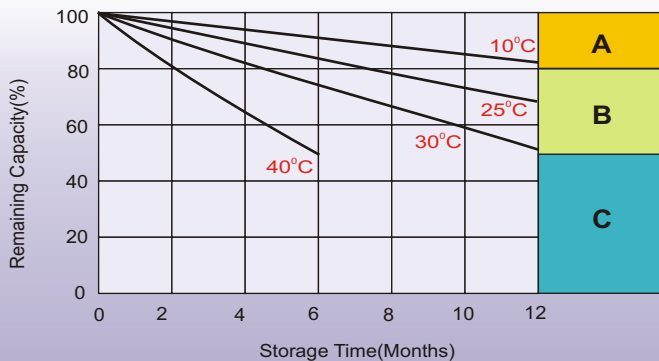
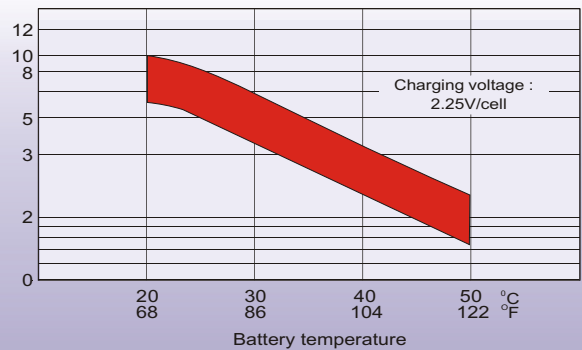
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.