

Specification

Nominal Voltage	12V
Watts(15min Rate)	33.3 Watts at 1.67V/cell
Dimension	Length 151±2mm (5.95 inches)
	Width 65±1mm (2.56 inches)
	Container Height 93.5±1mm (3.68 inches)
	Total Height (with Terminal) 99±1mm (3.90 inches)
Approx Weight	Approx 2.66 kg (5.87lbs)
Terminal	T2
Container Material	ABS
Rated Capacity	7.98 AH/0.798A (10hr, 1.80V/cell, 25°C/77°F)
	7.65 AH/0.956 A (8hr, 1.80V/cell, 25°C/77°F)
	7.10 AH/1.42A (5hr, 1.75V/cell, 25°C/77°F)
	6.45 AH/2.15A (3hr, 1.75V/cell, 25°C/77°F)
	5.96 AH/5.96A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	135A (5s)
Internal Resistance	Approx 17mΩ
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 2.58A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Standby Use	
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	3min	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h
1.85V/cell	38.1	28.6	19.1	15.0	12.4	9.24	6.71	5.24	2.84	2.03	1.61	1.34	1.16	0.927	0.776
1.80V/cell	42.3	32.1	20.9	16.2	13.2	9.65	6.95	5.43	2.93	2.09	1.64	1.38	1.19	0.956	0.798
1.75V/cell	47.3	35.3	22.1	17.2	13.9	10.0	7.20	5.61	3.03	2.15	1.70	1.42	1.23	0.994	0.819
1.70V/cell	48.8	37.6	23.3	18.0	14.3	10.4	7.42	5.75	3.12	2.22	1.75	1.46	1.26	1.00	0.834
1.67V/cell	51.6	39.3	24.1	18.5	14.8	10.7	7.60	5.86	3.17	2.26	1.79	1.49	1.28	1.02	0.843
1.60V/cell	54.2	40.5	25.0	18.9	15.1	10.9	7.72	5.96	3.22	2.28	1.81	1.51	1.30	1.03	0.850

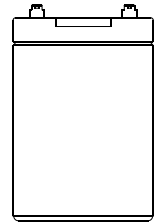
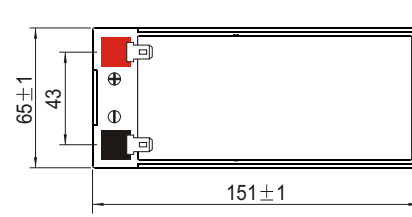
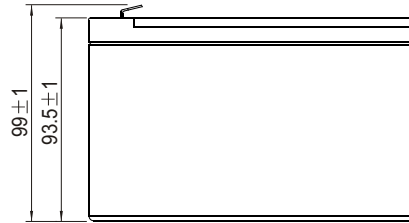
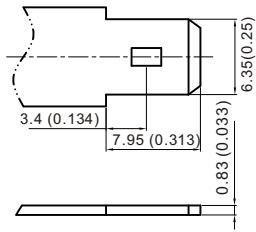
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h
1.85V/cell	69.6	52.8	35.6	28.2	23.5	17.6	12.9	10.1	5.50	3.95	3.14	2.63	2.28	1.83	1.54
1.80V/cell	75.8	58.4	38.4	30.1	24.7	18.2	13.2	10.4	5.66	4.06	3.20	2.69	2.34	1.88	1.58
1.75V/cell	83.0	63.4	40.1	31.6	25.7	18.8	13.6	10.7	5.82	4.15	3.30	2.78	2.41	1.95	1.61
1.70V/cell	83.8	66.5	41.8	32.6	26.3	19.4	14.0	10.9	5.97	4.27	3.39	2.84	2.46	1.97	1.64
1.67V/cell	87.6	68.4	42.6	33.3	27.0	19.8	14.2	11.1	6.05	4.33	3.45	2.89	2.49	2.00	1.65
1.60V/cell	90.1	69.5	43.6	33.6	27.2	20.0	14.3	11.2	6.12	4.37	3.47	2.92	2.52	2.01	1.67

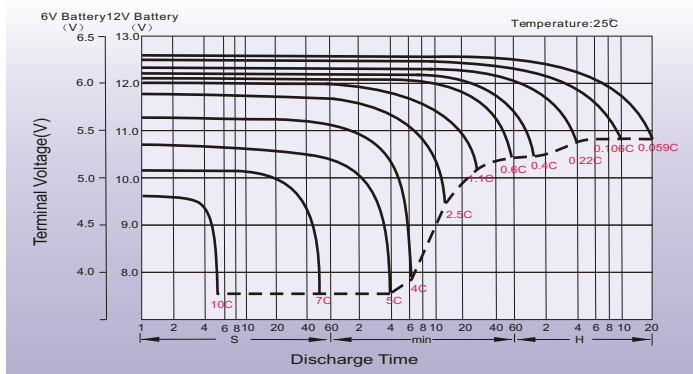
Dimensions

T2 Terminal

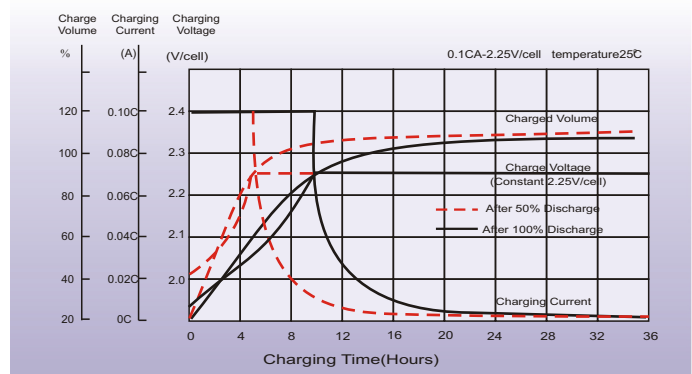
Unit: mm [inches]



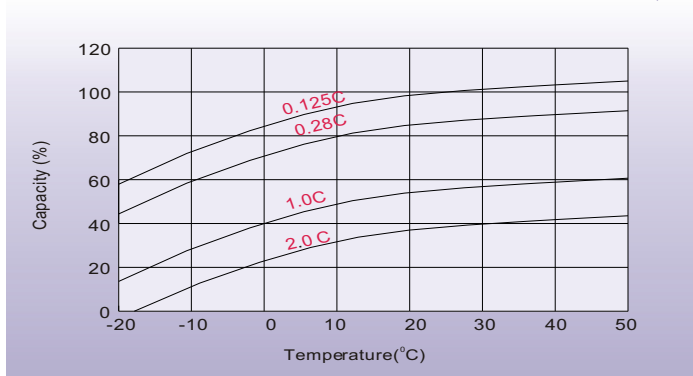
Discharge Characteristics



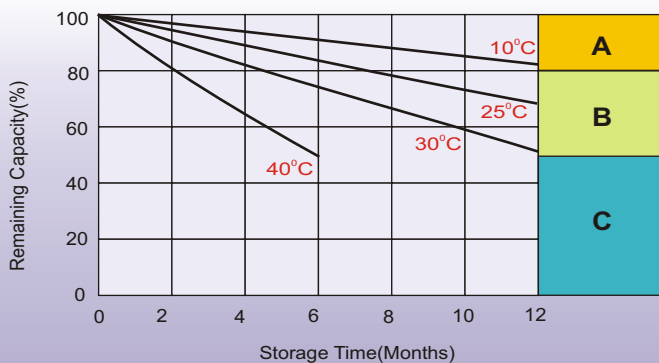
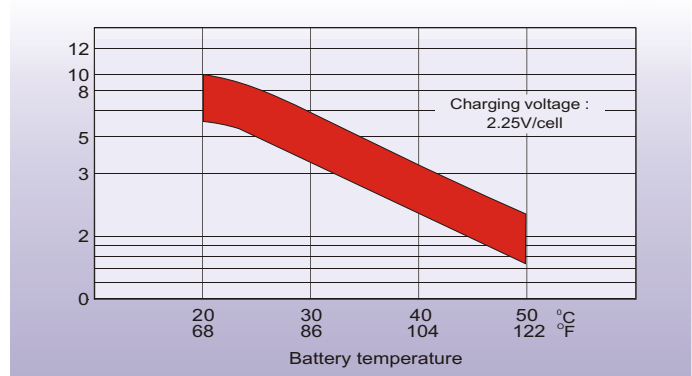
Float Charging Characteristics



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.