

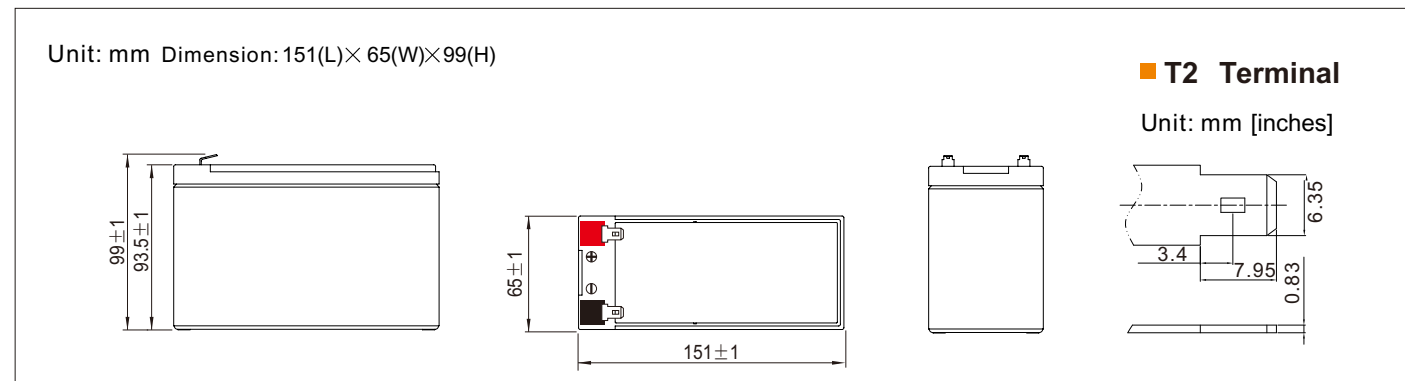
# Sealed Lead-Acid Battery High Rate Specification

## 198-4037 (12V7.8 Ah)

Rated Voltage	12V
Normal Capacity	7.8 Ah (C <sub>10</sub> , 1.80V/cell)
Approx Weight	2.50 kg
Max. Discharge Current	108 A (5 s)
Internal Resistance	Approx 22 mΩ
Operating Temp. Range	Discharge : -15~55°C (4~131°F) Charge : 0~40°C (32~104°F) Storage : -15~50°C (5~122°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
Float charging Voltage	13.5V DC/unit Average at 25°C. Coefficient -20mV/°C
Recommended Maximum Charging Current Limit	2.16 A
Equalization and Cycle Service	14.1 to 14.4V DC/unit Average at 25°C. Coefficient -30mV/°C
Terminal	T2
Container Material	ABS
Self Discharge	The batteries can 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.



### Dimensions



Constant Current Discharge (Amperes) at 25 °C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	24.8	16.5	13.4	10.4	7.75	5.62	4.49	3.32	2.66	1.99	1.57	1.31	0.894	0.732
1.80V/cell	28.9	19.5	15.5	12.0	8.76	6.28	4.97	3.63	2.89	2.15	1.70	1.41	0.958	0.781
1.75V/cell	31.6	20.9	16.4	12.6	9.16	6.54	5.16	3.75	2.98	2.21	1.74	1.44	0.975	0.793
1.70V/cell	34.2	22.3	17.4	13.3	9.56	6.79	5.35	3.88	3.07	2.27	1.78	1.48	0.992	0.806
1.67V/cell	35.7	23.2	17.9	13.6	9.80	6.94	5.46	3.95	3.13	2.31	1.81	1.50	1.00	0.813
1.60V/cell	39.4	25.1	19.2	14.5	10.3	7.29	5.72	4.13	3.26	2.39	1.87	1.54	1.03	0.830

Constant Power Discharge (Watts/cell) at 25 °C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	47.3	31.7	26.6	20.1	15.0	10.9	8.73	6.47	5.19	3.90	3.09	2.58	1.77	1.45
1.80V/cell	54.5	37.0	30.5	22.9	16.8	12.1	9.6	7.04	5.62	4.20	3.32	2.77	1.89	1.54
1.75V/cell	58.7	39.2	32.9	23.8	17.4	12.5	9.88	7.23	5.76	4.30	3.39	2.83	1.92	1.57
1.70V/cell	62.7	41.3	34.3	24.8	18.0	12.9	10.2	7.43	5.91	4.40	3.47	2.88	1.95	1.59
1.67V/cell	64.9	42.5	35.0	25.3	18.4	13.1	10.3	7.54	5.99	4.45	3.51	2.91	1.97	1.60
1.60V/cell	70.7	45.5	36.9	26.6	19.2	13.6	10.7	7.81	6.20	4.59	3.60	2.99	2.01	1.63

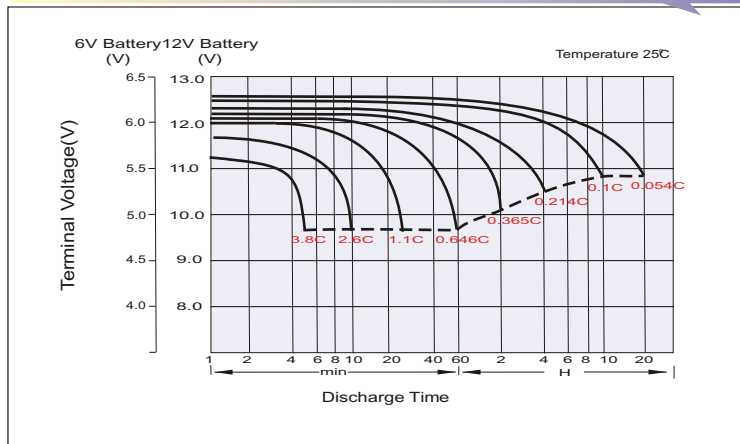
## Applications

- ◆ UPS
- ◆ Hospitals & Testing Laboratories
- ◆ Emergency Power Supply
- ◆ Industrial Process Control Facilities
- ◆ Banks & Financial Markets
- ◆ Data & Network Operation Centers

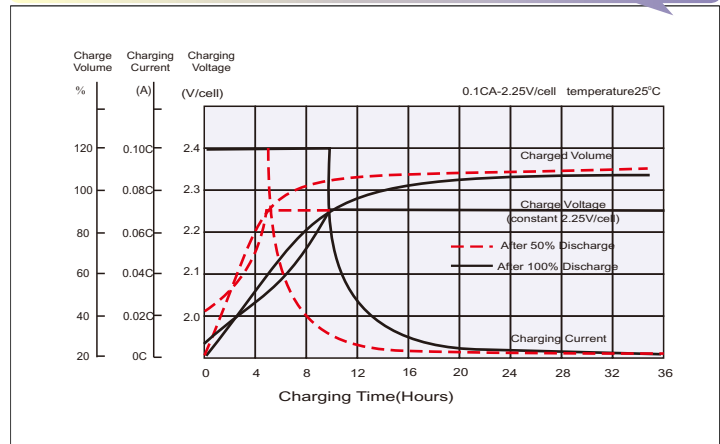
## General Features

- ◆ ABS material: UL94 HB
- ◆ Oxygen recombination efficiency:  $\geq 98\%$
- ◆ High quality AGM separator: extend cycle life and prevent micro short circuit
- ◆ Unique vent valve design: reduce water losing and prevent air/spark going inside
- ◆ PbCaSn alloy for plate grids: less gassing, less self-discharging

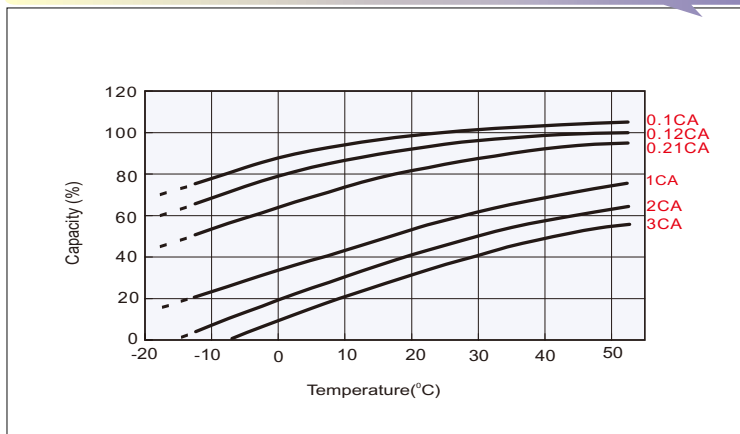
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects In Relation To Battery Capacity



### Temperature Effects on Long Term Float Life

