

Sealed Lead-Acid Battery High Rate

198-4040(12V38Ah)

Specification

Rated Voltage	12V
Normal Capacity	38 Ah (C ₁₀ , 1.80V/cell)
Approx Weight	11.6 kg
Max. Discharge Current	500A(5 s)
Internal Resistance	Approx 10.0 mΩ
Operating Temp. Range	Discharge : -20~55°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	9.5A
Equalization and Cycle Service	14.1 to 14.4V DC/unit Average at 25°C. Coefficient -30mV/°C
Terminal	T6
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

Unit: mm Dimension: 197(L)×165(W)×170(H)

■ T6 Terminal

Unit: mm [inches]

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	71.8	57.3	49.7	39.1	27.6	26.8	21.0	15.6	12.6	9.35	7.40	6.26	4.32	3.70
1.80V/cell	81.6	65.1	56.3	44.2	31.1	28.4	22.4	16.6	13.3	9.79	7.67	6.50	4.41	3.80
1.75V/cell	88.7	70.6	61.0	47.7	33.4	29.6	23.3	17.2	13.8	10.1	7.92	6.69	4.46	3.82
1.70V/cell	94.8	75.2	64.7	50.6	35.4	30.5	23.9	17.7	14.1	10.3	8.12	6.84	4.53	3.84
1.67V/cell	98.1	77.6	66.6	52.0	36.3	31.3	24.5	18.1	14.5	10.6	8.22	6.93	4.58	3.90
1.60V/cell	101.6	80.3	68.7	53.3	37.2	31.9	24.9	18.5	14.8	10.8	8.41	7.07	4.60	3.92

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	134.1	107.8	94.1	74.3	52.7	51.6	40.7	30.3	24.4	18.3	14.5	12.3	8.58	7.35
1.80V/cell	150.0	120.6	105.2	83.1	58.9	54.3	43.0	32.0	25.7	19.0	15.0	12.8	8.73	7.55
1.75V/cell	160.1	128.7	112.3	88.7	62.9	56.1	44.6	33.1	26.6	19.6	15.4	13.1	8.80	7.57
1.70V/cell	168.3	135.3	118.1	93.3	66.1	57.5	45.5	33.8	27.1	20.0	15.7	13.3	8.92	7.61
1.67V/cell	171.0	137.5	120.0	94.8	67.2	58.7	46.4	34.4	27.7	20.3	15.9	13.5	9.00	7.72
1.60V/cell	173.4	139.4	121.7	96.1	68.1	59.2	46.9	34.8	28.0	20.7	16.2	13.7	9.03	7.75

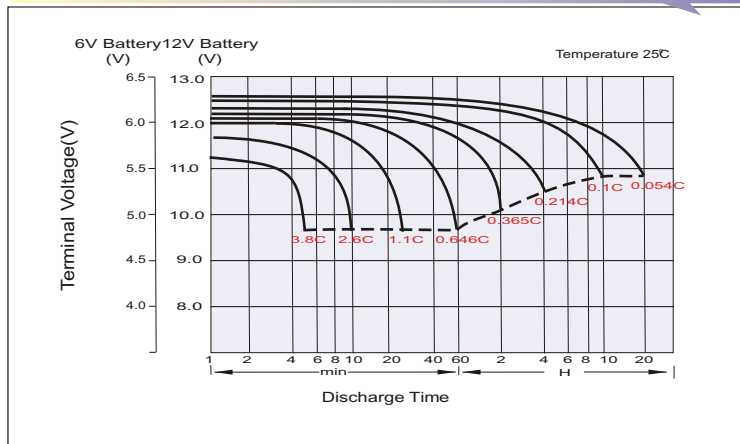
Applications

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

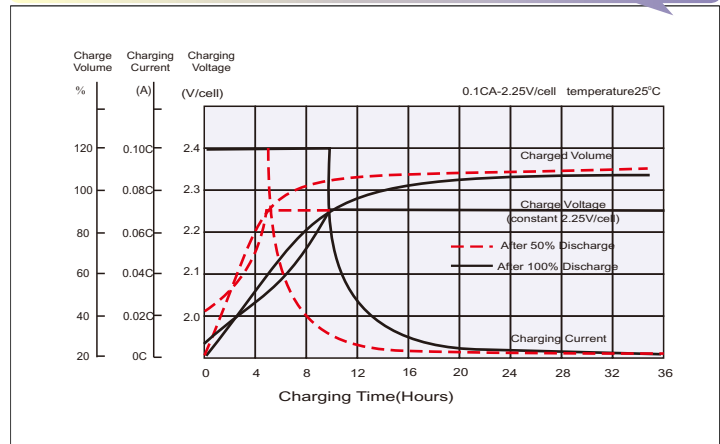
General Features

- ◆ 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

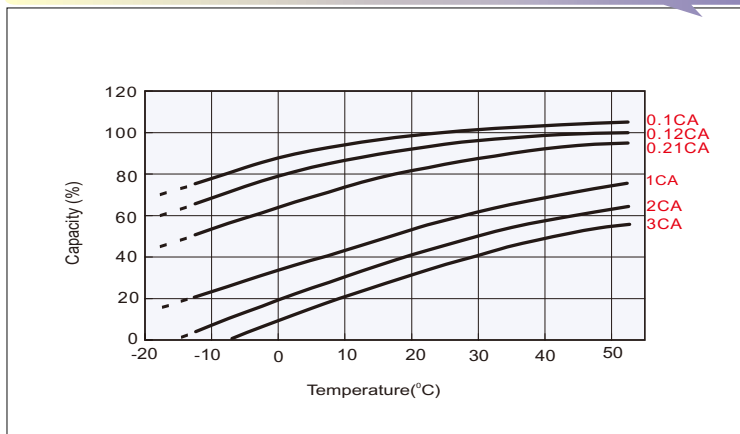
Discharge Characteristics



Float Charging Characteristics



Temperature Effects In Relation To Battery Capacity



Temperature Effects on Long Term Float Life

