

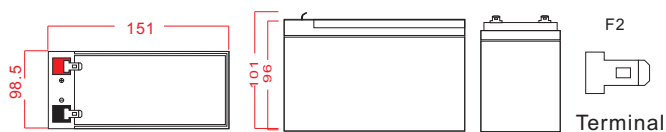


General Features

- High corrosion resistant performance: Pb-Ca multi-alloy grid
- High energy density and power density
- Optimized capability of instant high-current discharging
- Excellent charge acceptance ability
- Strong high and low temperature performance
- Precision sealing technology



Dimension: 151(L)×98.5(W)×96(H)×101(TH) Unit: mm



Applications

- EPS/Power systems
- Power tools
- Security system/Fire alarm
- Factory automation equipment
- Emergency lighting/Auto control system
- Portable electric device
- Other general purpose

Specification

Nominal Voltage	12V
Nominal Capacity	12Ah
Design life	5 years
Terminal	F2
Approx. Weight	Approx 3.45kg (7.61lbs)
Container Material	ABS
Rated Capacity	12.0Ah 20Hour Rate (0.60A to 10.5V)
	9.33Ah 3Hour Rate (3.11A to 10.5V)
	7.92Ah 1Hour Rate (7.92A to 9.60V)
Internal resistance	Full charged at 25°C: 18.0 mΩ
Max. Discharge Current	180A(5S)
Operating Temperature	Discharge: -40 ~60°C(-40~ 140°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max. 3.00A ; Recom.1.20A
Charge Method (25 °C)	Float Charge:13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle charge:14.4-15.0V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

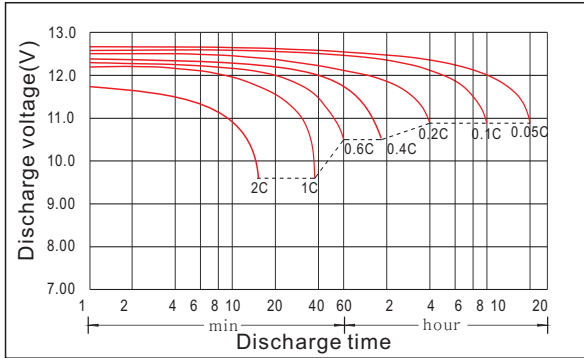
FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	47.5	31.1	23.2	15.2	7.92	4.54	3.31	2.65	2.26	1.49	1.19	0.636
1.65V	47.2	29.8	21.2	14.4	7.44	4.36	3.22	2.57	2.21	1.46	1.18	0.624
1.70V	38.6	28.0	19.8	14.0	7.20	4.27	3.16	2.44	2.18	1.44	1.15	0.612
1.75V	35.9	26.6	18.5	13.6	6.95	4.16	3.11	2.40	2.09	1.40	1.13	0.600
1.80V	33.0	25.1	17.2	13.2	6.71	4.06	2.94	2.35	2.00	1.37	1.10	0.576

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

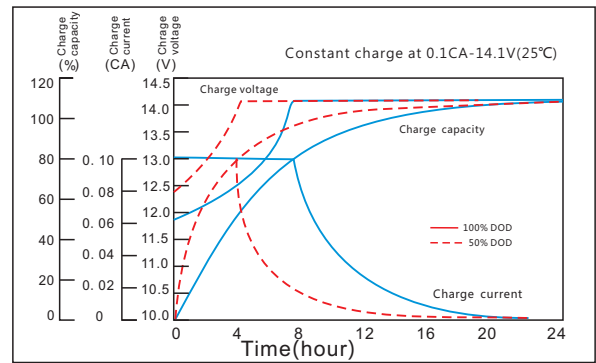
FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	89.2	56.0	42.4	25.6	14.5	8.50	6.26	5.02	4.26	2.81	2.30	1.26
1.65V	82.2	53.0	39.8	25.5	13.7	8.18	6.08	4.86	4.18	2.77	2.26	1.23
1.70V	75.2	51.4	38.0	25.4	13.2	8.02	5.98	4.62	4.06	2.74	2.24	1.22
1.75V	68.2	49.8	36.6	25.1	12.9	7.84	5.90	4.56	3.98	2.63	2.19	1.19
1.80V	61.2	48.2	35.0	24.9	12.7	7.78	5.74	4.52	3.88	2.54	2.14	1.18

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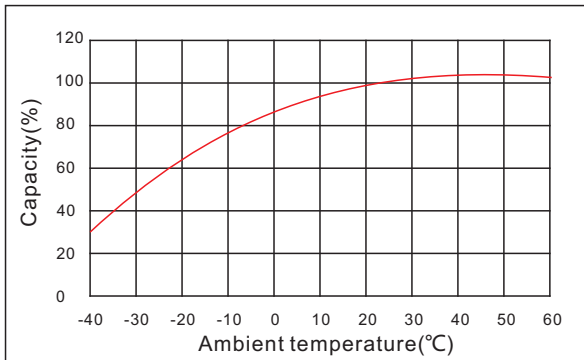
Discharge characteristic



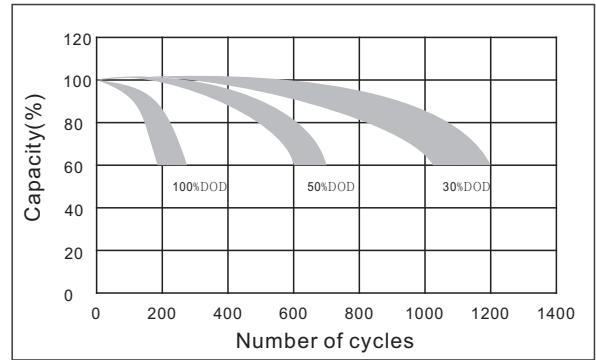
Charging characteristic



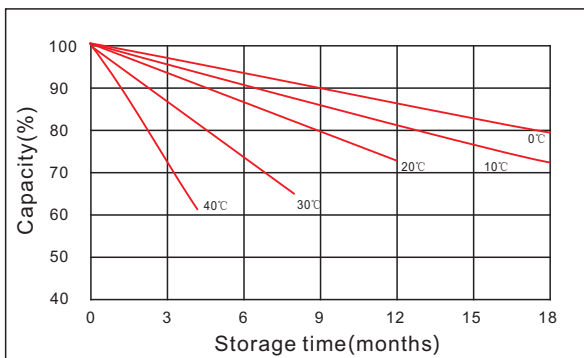
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

