



JM Series lead-acid battery JM12-50(A)

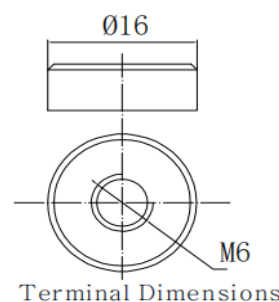
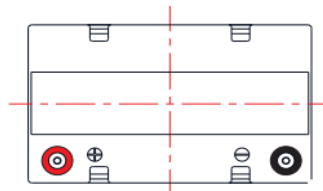
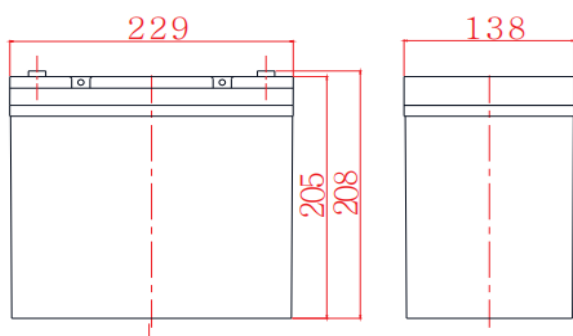
General Features

- ▶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
- ▶Excellent deep cycle discharge capability
- ▶Strong high and low temperature performance
- ▶Precision sealing technology
- ▶Long life



Dimension:229(L)×138(W) ×205(H)×208(TH)/(±3)

Unit: mm



Terminal Dimensions

Specification

Nominal Voltage	12V
Nominal Capacity	50Ah@10hour-rate to 1.80V per cell @25°C
Design life	10 years
Terminal	M6
Approx. Weight	Approx15.5kg±3% (34.2±3%lbs)
Container Material	ABS(UL94-HB, UL94-V0 Optional)
short-circuit current	1142A
Internal resistance(Full charged at 25°C:)	10.5 mΩ
Self discharge	3% of capacity declined per month at 25°C

Operating Temperature

Discharge:	-20 ~50°C(-4~ 122°F)
Charge :	-20 ~50°C(-4~ 122°F)
Storage:	-20 ~50°C(-4~ 122°F)

Charge Method(25 °C)

Charge current:	Max. 11.3A;Recom.4.5A
Float charge:13.5-13.8V	recom.13.8V(-18mV/ °C)
Equalize charge:13.8-14.1V	recom.14.1V(-24mV/ °C)
Cycle charge:14.4-15.0V	recom.14.7V(-30mV/ °C)

Standards

Executive standard: IEC 60896-21/22,
GB/T 19638.1-2014

Applications

- ▶UPS/EPS
- ▶Power systems
- ▶Telecommunications system
- ▶Emergency lighting, Auto control system
- ▶Solar/wind generating storage cyclic
- ▶Other general purpose

Rated Capacity

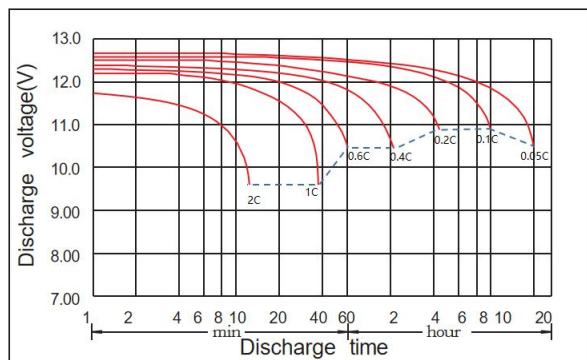
10Hour Rate (5.00A to 10.8V)	50.0Ah
3Hour Rate (13.3A to 10.2V)	39.9Ah
1Hour Rate (31.6A to 9.6V)	31.6Ah

Attain Certificate

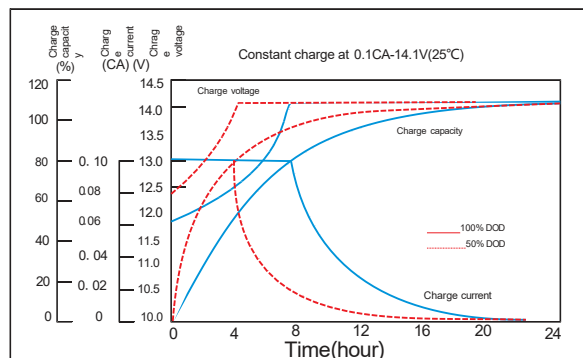
			RoHS

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

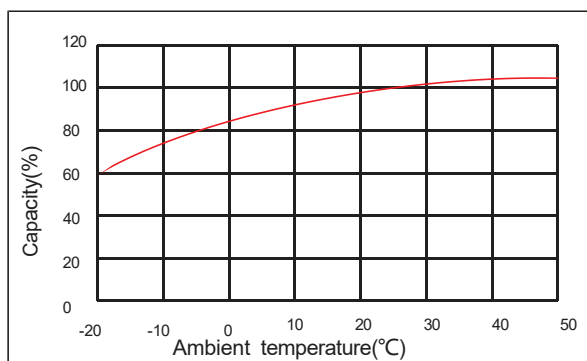
Discharge characteristic



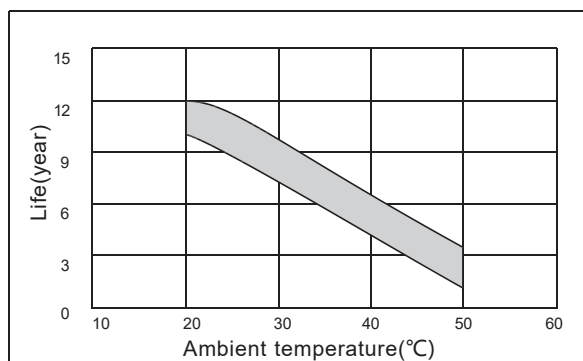
Charging characteristic



The effect of temperature on capacity



The effect of temperature on float life



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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	92.3	54.8	40.1	31.6	23.5	18.7	14.1	11.4	9.67	8.22	6.34	5.27	2.76
1.65V	88.6	52.6	38.5	30.4	22.8	18.3	13.7	11.0	9.42	8.10	6.27	5.21	2.72
1.70V	83.0	50.2	36.8	29.1	21.9	17.6	13.3	10.8	9.17	7.93	6.17	5.13	2.69
1.75V	77.2	47.5	35.2	28.2	21.0	16.9	12.9	10.5	8.94	7.73	6.09	5.06	2.68
1.80V	72.8	46.2	33.9	27.0	20.0	16.4	12.8	10.2	8.71	7.50	5.98	5.00	2.65
1.85V	60.4	39.1	29.6	23.7	18.1	14.5	11.2	9.23	7.93	6.84	5.62	4.61	2.54

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

FV/Time	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	162.1	99.5	72.9	57.9	43.5	34.5	26.6	21.3	18.2	15.8	12.4	10.4	5.43
1.65V	157.2	96.5	70.6	56.3	42.4	33.9	26.2	20.8	17.8	15.6	12.3	10.3	5.35
1.70V	149.5	93.1	69.8	54.8	41.8	32.8	25.1	20.3	17.4	15.3	12.1	10.1	5.30
1.75V	141.1	89.9	66.9	53.6	40.6	31.9	25.0	19.8	17.0	15.0	12.0	9.99	5.28
1.80V	133.5	86.8	64.4	51.4	38.5	31.4	24.3	19.6	16.6	14.7	11.8	9.88	5.24
1.85V	111.2	75.5	57.2	45.9	35.8	28.7	21.8	18.1	15.5	13.5	11.1	9.31	4.94