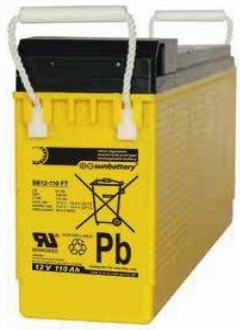
valve regulated
sealed lead acid type
rechargeable battery

sunbattery®

SB12-110AFT(12V110AH)

Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	100.0AH
Dimension	Length 508±3mm (20.0 inches) Width 110±2mm (4.33 inches) Container Height 238.5±3mm (9.39 inches) Total Height (with Terminal) 238.5±3mm (9.39 inches)
Approx Weight	Approx 35.0 Kg (77.2 lbs)
Terminal	T13
Container Material	ABS
Rated Capacity	106.0 AH/5.30A (20hr,1.80V/cell,25°C/77°F) 100.0 AH/10.0A (10hr,1.80V/cell,25°C/77°F) 95.2 AH/11.9A (8hr,1.80V/cell,25°C/77°F) 87.0 AH/17.4A (5hr,1.75V/cell,25°C/77°F) 63.7 AH/63.7A (1hr,1.67V/cell,25°C/77°F)
Max. Discharge Current	1000A (5s)
Internal Resistance	Approx 4.3mΩ
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 30.0A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%
Self Discharge	SB 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.
Life expectancy	8-12 years at 25°C with charge voltage 2.25V/cell.



Applications

- *For standard 19 inches or 23 inches power cabinets*
- *Network connection equipment of communication system*
- *Power system of special network or local area network*
- *UPS, standby power supply*
- *Power station systems*
- *Railway and marine systems*

MH45680 | Intertek ETL SEMKO | ISO14001 | ISO9001

Comform to:
IEC60896-21&22 and/or IEC61427

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	144.6	127.2	114.0	91.6	69.6	56.3	33.6	24.7	19.9	16.7	14.5	11.5	9.56	5.07
1.80V/cell	168.0	146.8	127.2	99.0	74.3	59.5	34.8	25.7	20.5	17.2	14.8	11.9	10.0	5.30
1.75V/cell	185.4	158.0	133.2	103.2	76.8	61.4	35.6	26.1	20.8	17.4	15.1	12.1	10.1	5.35
1.70V/cell	197.4	165.6	138.6	106.0	78.8	62.8	36.2	26.5	21.1	17.6	15.3	12.2	10.2	5.38
1.67V/cell	206.4	171.2	144.0	108.4	80.1	63.7	36.6	26.7	21.3	17.8	15.4	12.3	10.3	5.41
1.60V/cell	215.4	176.0	146.4	110.6	80.9	64.3	37.1	27.0	21.5	18.1	15.6	12.5	10.4	5.44

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

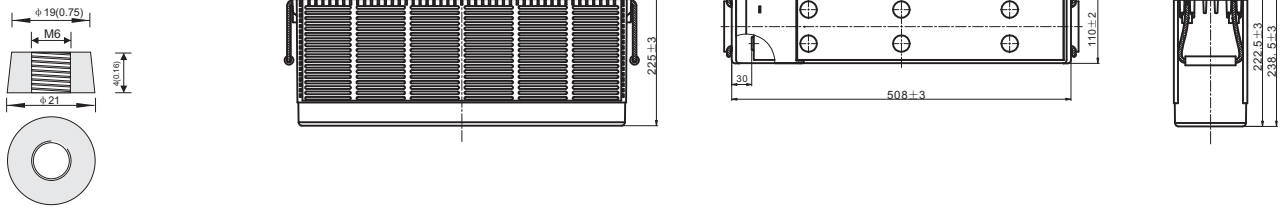
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	270.0	239.9	217.2	176.4	135.2	109.7	65.8	48.6	39.3	33.1	28.7	22.9	19.1	10.1
1.80V/cell	310.0	273.2	238.8	187.8	143.1	115.3	67.7	50.4	40.3	33.9	29.3	23.6	20.0	10.6
1.75V/cell	336.7	290.5	247.7	194.2	146.6	118.5	69.0	51.0	40.7	34.2	29.7	23.9	20.2	10.7
1.70V/cell	350.5	300.2	255.8	198.3	149.9	120.8	70.1	51.6	41.2	34.4	30.0	24.2	20.3	10.7
1.67V/cell	365.1	309.1	264.7	202.4	151.9	122.2	70.8	51.9	41.5	34.8	30.2	24.4	20.5	10.8
1.60V/cell	370.4	311.5	265.3	203.8	151.8	122.2	71.1	52.2	41.7	35.2	30.6	24.6	20.7	10.8

Specifications subject to change without notice.

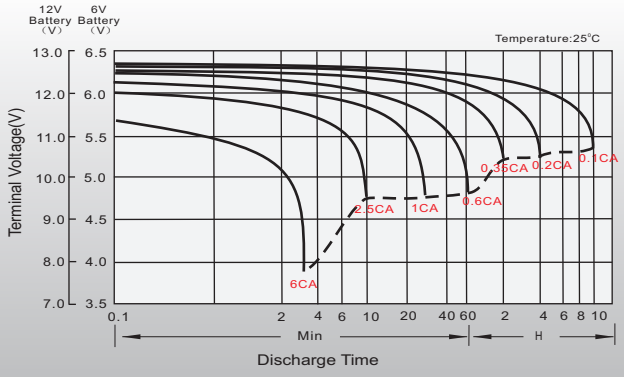
Dimensions

T13 Terminal

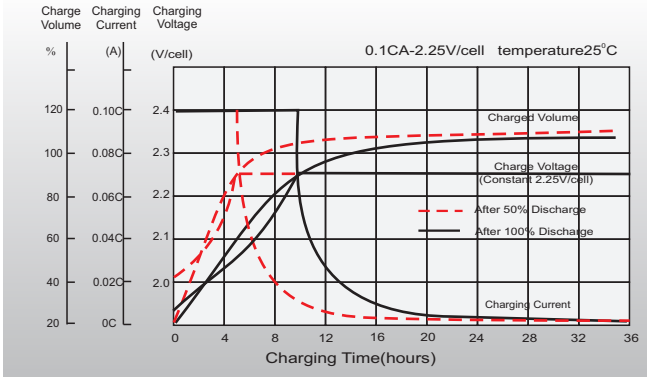
Unit: mm [inches]



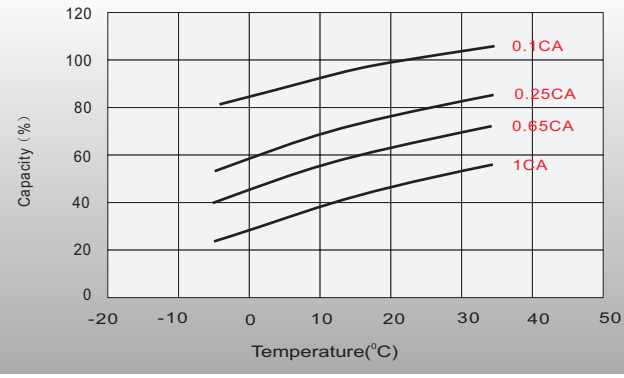
Discharge Characteristics



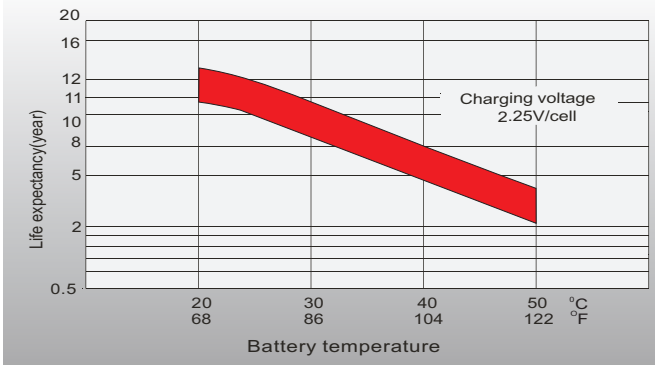
Float Charging Characteristics

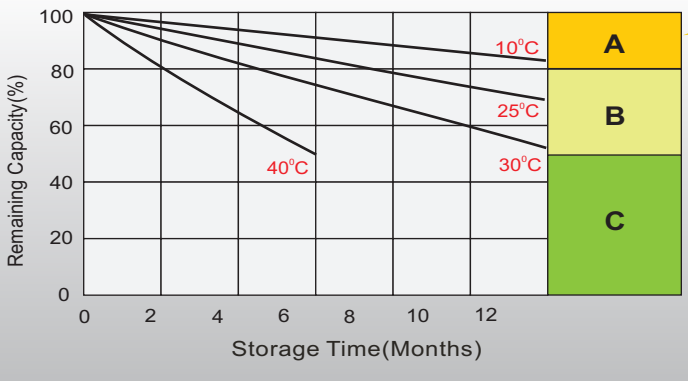


Temperature Effects in Relation to Battery Capacity



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 limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.