

# SSB SBL 40-12i (12V 40AH)

# **Specification**

Nominal Voltage 12V 40.0AH **Nominal Capacity** (10hr / 20°C / 1.80 V/C) 10 hour rate (4.0A, 10.8V) 40.0Ah 5 hour rate (6.83A, 10.5V) 34.15Ah 1 hour rate (24.9A, 9.6V) 24.9Ah Fully Charged battery 68°F(20°C) Internal Resistance ≤19 mOhms Self-Discharge 3% of capacity declined per month at 20°C (average) SSB series batteries may be stored for up to 6 months at 68°F(20°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter. Length (mm / inch) 197.5 / 7.78 165.5 / 6.52 Width (mm / inch) Dimension Height (mm / inch 170 / 6.69 170 / 6.69 Total Height (mm / inch) Approx. Weight (Kg / lbs) 13.8 / 30.4 Discharge: -20~50°C Operating Temperature Range Charge : -10~50°C (temporarily - see our manual) Storage : -20~50°C Max. Discharge Current 68°F(20°C) 400A(5s) Short Circuit Current 900A Cycle use 2.40-2.45VPC Charge Methods: Maximum charging current 12.0A Constant Voltage Charge Temperature compensation -30mV/°C 68°F(20°C) Standby use 2.20-2.28VPC Temperature compensation -20mV/°C Life expectancy 10~12 years at 20°C with charge voltage 2.25V/cell



# **Applications**

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- ♦ UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- ♦ Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.









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

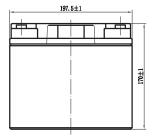
Discharge Constant Current (Amperes at 68°F20°C)										
End Point Volts/Cell	10min	15min	30min	1h	3h	5h	10h	20h		
1.60V	86.5	70.7	39.9	24.9	10.3	7.22	4.20	2.22		
1.65V	82.2	67.1	38.7	24.6	10.1	7.10	4.15	2.20		
1.70V	77.8	64.5	37.3	24.2	9.89	6.97	4.10	2.18		
1.75V	73.6	61.0	36.1	23.9	9.65	6.83	4.05	2.15		
1.80V	69.9	55.2	35.8	23.5	9.43	6.66	4.00	2.11		

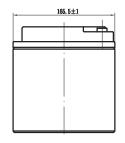
Discharge Constant Current (Watts at 68°F20°C)										
End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h		
1.60V	158	124	81.2	60.2	49.9	27.5	21.0	14.0		
1.65V	152	120	78.8	59.0	49.2	27.1	20.7	13.8		
1.70V	144	117	76.3	57.8	48.3	26.6	20.3	13.6		
1.75V	138	113	73.8	56.6	47.5	26.2	20.0	13.4		
1.80V	130	109	71.3	55.4	46.7	25.8	19.6	13.3		

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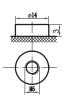
Updated: 07.01.2019

### **Dimensions**

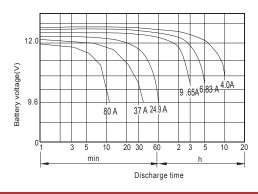




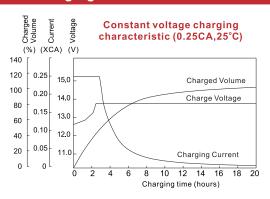
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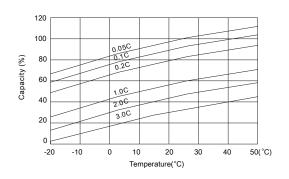
# **Discharge Characteristics**



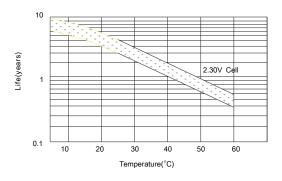
# Float Charging Characteristics



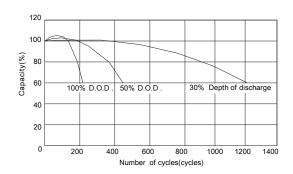
#### **Temperature Effects in Relation to Battery Capacity**



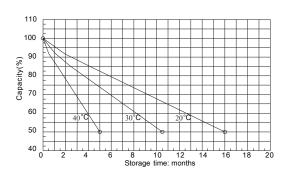
#### **Effect of Temperature on Long Term Float Life**



### Cycle Life in Relation to Depth of Discharge



### **Self Discharge Characteristics**



A No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)

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.

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