

S Series General Purpose Battery

S-1250 (12V5.8AH) AGM Sealed Lead Acid

| Specifications | |
|----------------------------------|---|
| Nominal Voltage | 12V |
| Nominal Capacity | 5.8 AH/0.290A (20 hr. to 1.80V/cell @ 77°F/25°C) 5.5 AH/0.551A (10 hr. to 1.80V/cell @ 77°F/25°C) 5.5 AH/0.690A (8 hr. to 1.75V/cell @ 77°F/25°C) |
| Length | 3.54 in. (90±1mm) |
| Width | 2.76 in. (70±1mm) |
| Total Height (with Terminal) | 4.21 in. (107±2mm) |
| Approx. Weight | Approx. 3.90 lb. (1.77kg) |
| Tab Terminal | T1 |
| Container Material | ABS |
| Max. Discharge Current | 87A (5s) |
| Internal Resistance | Approx. 25mΩ |
| Operating Temp. Range | Discharge: 5° to 130°F (-15° to 55°C) Charge: 32° to 104°F (0° to 40°C) Storage: 5° to 104°F (-15° to 40°C) |
| Nominal Operating Temp. | 77±5°F (25±3°C) |
| Cycle Use | Initial Charging Current less than 1.74A Voltage 14.4V to 15.0V at 77°F (25°C) Temp. Coefficient -30mV/°C |
| Stand by Use | Float Voltage: 13.5V at 77°F (25°C) Equalize Voltage: 14.1V at 77°F (25°C) |
| Capacity Affected by Temperature | 104°F (40°C) 103% 77°F (25°C) 100% 32°F (0°C) 86% |
| Self Discharge | SBS S Series batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |



Applications

- Telecommunications
- Utility
- Industrial
- Deep cycle
- All purpose



S-1250 (12V5.8AH)

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

| F.V/Time | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hr | 2 hr | 3 hr | 4 hr | 5 hr | 6 hr | 8 hr | 10 hr | 20 hr |
|------------|-------|--------|--------|--------|--------|--------|------|------|------|------|-------|-------|-------|-------|-------|
| 1.85V/cell | 11.5 | 8.03 | 6.62 | 5.74 | 4.61 | 3.54 | 2.90 | 1.77 | 1.35 | 1.11 | 0.941 | 0.815 | 0.648 | 0.539 | 0.287 |
| 1.80V/cell | 14.2 | 9.58 | 7.68 | 6.50 | 5.10 | 3.86 | 3.12 | 1.88 | 1.42 | 1.17 | 0.982 | 0.851 | 0.672 | 0.551 | 0.290 |
| 1.75V/cell | 16.8 | 10.8 | 8.47 | 7.07 | 5.45 | 4.10 | 3.28 | 1.96 | 1.47 | 1.20 | 1.01 | 0.872 | 0.690 | 0.569 | 0.293 |
| 1.70V/cell | 19.0 | 12.0 | 9.17 | 7.60 | 5.72 | 4.26 | 3.42 | 2.04 | 1.52 | 1.23 | 1.03 | 0.893 | 0.701 | 0.578 | 0.298 |
| 1.65V/cell | 21.0 | 12.9 | 9.70 | 7.97 | 5.96 | 4.43 | 3.56 | 2.10 | 1.55 | 1.26 | 1.06 | 0.910 | 0.712 | 0.586 | 0.303 |
| 1.60V/cell | 22.0 | 13.4 | 10.1 | 8.23 | 6.13 | 4.53 | 3.64 | 2.17 | 1.59 | 1.29 | 1.08 | 0.928 | 0.727 | 0.596 | 0.304 |

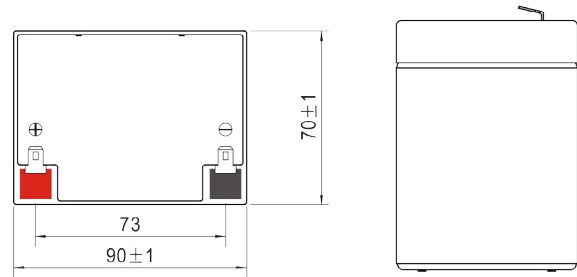
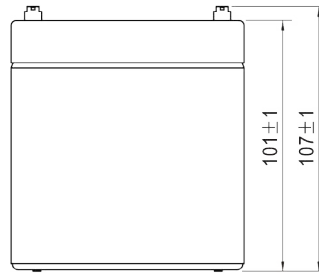
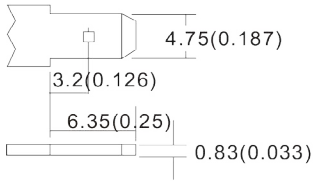
Constant Power Discharge (Watts/cell) at 77°F (25°C)

| F.V/Time | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 hr | 2 hr | 3 hr | 4 hr | 5 hr | 6 hr | 8 hr | 10 hr | 20 hr |
|------------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|-------|-------|
| 1.85V/cell | 21.7 | 15.3 | 12.7 | 11.1 | 8.99 | 6.95 | 5.71 | 3.50 | 2.68 | 2.21 | 1.88 | 1.63 | 1.30 | 1.09 | 0.580 |
| 1.80V/cell | 26.4 | 18.1 | 14.6 | 12.5 | 9.88 | 7.53 | 6.11 | 3.70 | 2.80 | 2.31 | 1.95 | 1.70 | 1.34 | 1.12 | 0.583 |
| 1.75V/cell | 30.9 | 20.2 | 16.0 | 13.5 | 10.5 | 7.95 | 6.40 | 3.84 | 2.88 | 2.37 | 1.99 | 1.73 | 1.37 | 1.13 | 0.585 |
| 1.70V/cell | 34.7 | 22.1 | 17.2 | 14.4 | 10.9 | 8.21 | 6.63 | 3.98 | 2.96 | 2.41 | 2.03 | 1.76 | 1.38 | 1.14 | 0.592 |
| 1.65V/cell | 37.7 | 23.4 | 17.9 | 14.9 | 11.3 | 8.48 | 6.86 | 4.07 | 3.02 | 2.45 | 2.07 | 1.78 | 1.40 | 1.15 | 0.597 |
| 1.60V/cell | 39.0 | 24.1 | 18.5 | 15.2 | 11.5 | 8.58 | 6.96 | 4.17 | 3.07 | 2.50 | 2.09 | 1.81 | 1.42 | 1.17 | 0.597 |

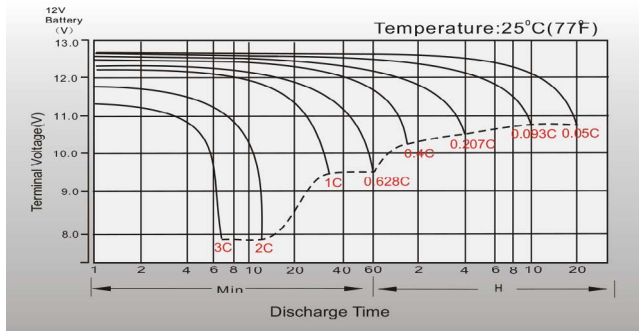
Dimensions

T1 Terminal

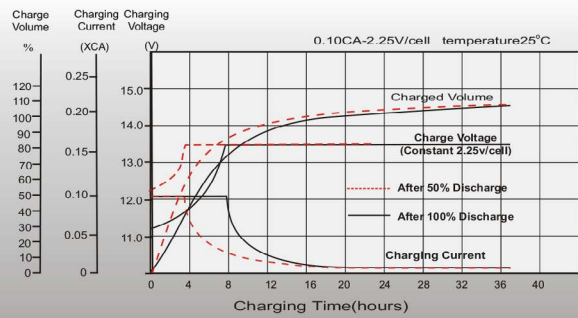
Unit: mm [inches]



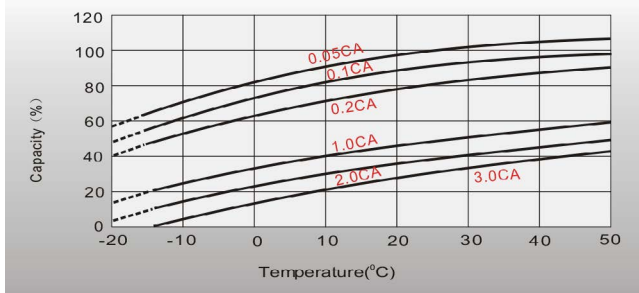
Discharge Characteristics



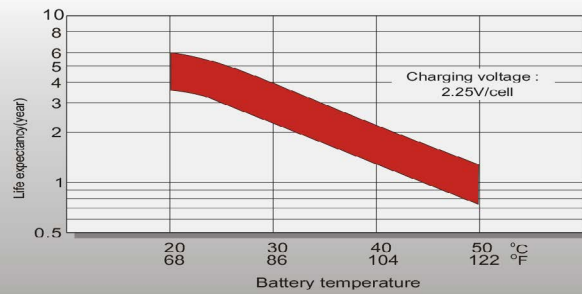
Float Charging Characteristics



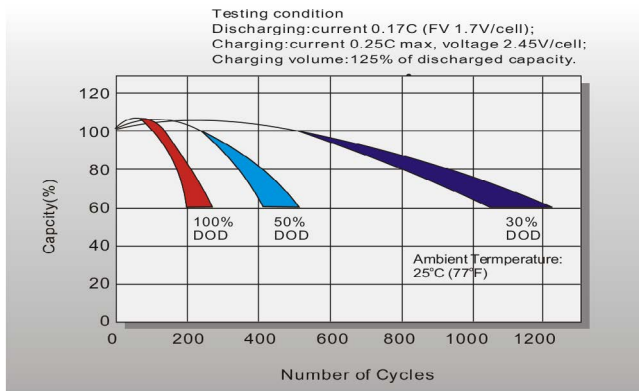
Temperature Effects in Relation to Battery Capacity



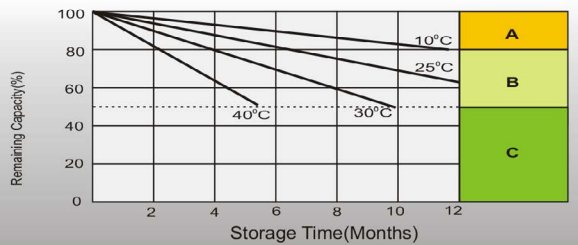
Effect of Temperature on Long Term Float Life



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.)
- B** Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.