

Features:

- ◆ Maintenance-free operation
- ◆ Stable quality and high reliability
- ◆ Compact design
- ◆ 5 years design time (at 25°C)



Applications

- ◆ UPS
- ◆ Alarm and security system
- ◆ Emergency lighting
- ◆ Electronic apparatus and equipment
- ◆ Fire alarm and security systems
- ◆ Communication power supply
- ◆ Telecommunication system
- ◆ DC power supply
- ◆ Backup power for testing and measuring instruments
- ◆ Auto control system

Specifications

| | |
|-----------------------|------------------------------------|
| Nominal Voltage | 12V(6cells) |
| | 1.2AH (20hr,1.75V/cell,25°C/77°F) |
| Nominal Capacity | 1.0 AH (5hr,1.75V/cell,25°C/77°F) |
| | 0.6 AH(1hr,1.60V/cell,25°C/77°F) |
| Dimension | Length 97 ±1mm |
| | Width 43±1mm |
| | Container Height 52 ±2mm |
| | Total Height(with Terminal) 57±2mm |
| Weight | 495G ± 3% |
| Terminal | F1 |
| Container Material | ABS UL94 V0 |
| Max.Discharge Current | 18 A(5S) |
| Internal Resistance | Approx 120mΩ |

| | |
|----------------------------------|--|
| 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 | 14.4~14.8V(25°C/77°F)Temp.Coefficient-30mV/°C |
| | Initial Charging Current Less than 0.36A |
| Standby Use | 13.5V~13.8V(25°C/77°F)Temp.Coefficient-20mV/°C |
| | No limit on Initial Charging Current |
| Capacity affected by Temperature | 40°C(104°F) 103% |
| | 25°C(77°F) 100% |
| | 0°C(32°F) 86% |
| Self Discharge | CASIL CA series batteries may be stored for up to 6months at 25°C(77°F)and then a freshening charge is required. |
| | For higher temperatures the time interval will be shorter. |

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

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|-------|-------|
| 1.60V | 3.8 | 3.0 | 2.0 | 1.1 | 1.0 | 0.60 | 0.3 | 0.25 | 0.21 | 0.19 | 0.16 | 0.112 | 0.062 |
| 1.67V | 3.8 | 2.9 | 2.0 | 1.1 | 0.94 | 0.59 | 0.3 | 0.25 | 0.21 | 0.19 | 0.16 | 0.111 | 0.062 |
| 1.70V | 3.7 | 2.9 | 2.0 | 1.1 | 0.92 | 0.58 | 0.3 | 0.24 | 0.21 | 0.18 | 0.16 | 0.110 | 0.061 |
| 1.75V | 3.6 | 2.8 | 1.9 | 1.1 | 0.90 | 0.56 | 0.30 | 0.24 | 0.20 | 0.18 | 0.16 | 0.108 | 0.060 |
| 1.80V | 3.5 | 2.8 | 1.9 | 1.0 | 0.89 | 0.55 | 0.29 | 0.24 | 0.20 | 0.18 | 0.15 | 0.106 | 0.059 |

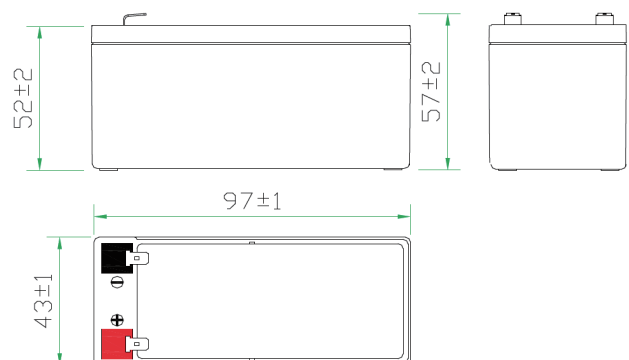
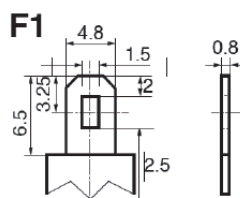
Constant Power Discharge (Watts per cell at 25°C / 77 °F)

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|------|-------|-------|-------|-------|-----|------|------|------|------|------|------|-------|
| 1.60V | 6.9 | 5.4 | 3.7 | 2.0 | 1.8 | 1.1 | 0.62 | 0.50 | 0.42 | 0.37 | 0.32 | 0.22 | 0.125 |
| 1.67V | 6.8 | 5.3 | 3.6 | 2.0 | 1.8 | 1.1 | 0.62 | 0.49 | 0.42 | 0.37 | 0.32 | 0.22 | 0.124 |
| 1.70V | 6.6 | 5.2 | 3.5 | 1.9 | 1.8 | 1.1 | 0.61 | 0.49 | 0.42 | 0.37 | 0.32 | 0.22 | 0.122 |
| 1.75V | 6.5 | 5.1 | 3.5 | 1.9 | 1.7 | 1.1 | 0.60 | 0.48 | 0.41 | 0.36 | 0.31 | 0.22 | 0.120 |
| 1.80V | 6.4 | 5.0 | 3.4 | 1.9 | 1.7 | 1.1 | 0.59 | 0.47 | 0.40 | 0.35 | 0.31 | 0.21 | 0.118 |

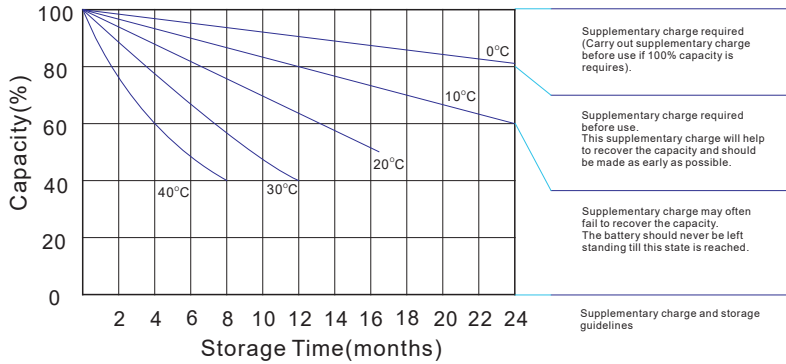
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions
Unit:mm [Inches]

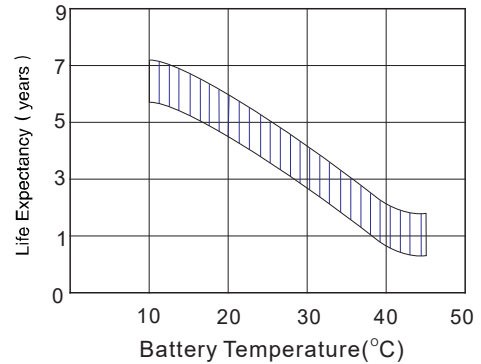
Terminal



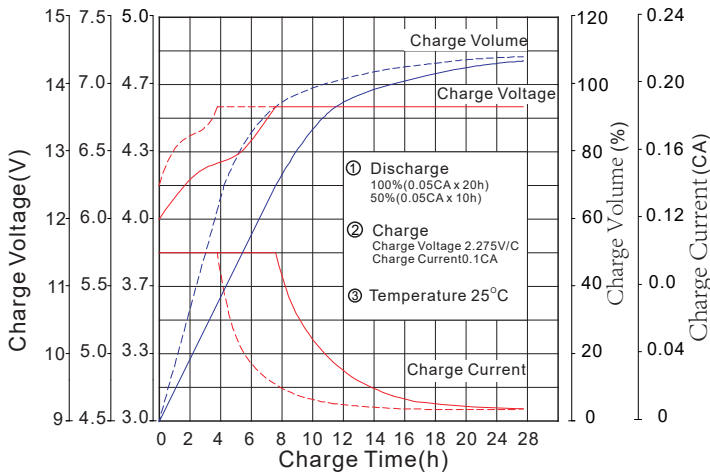
Storage characteristics



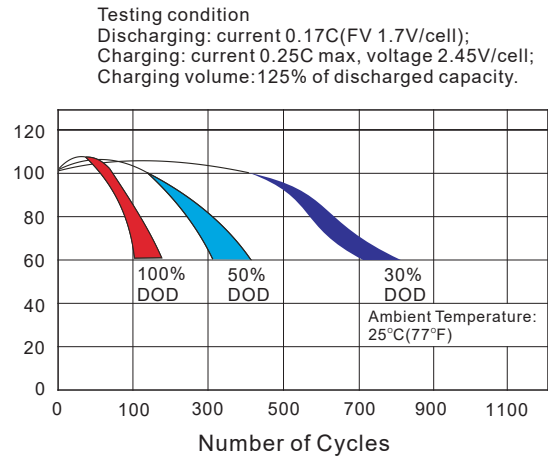
Effect of temperature on long term float life



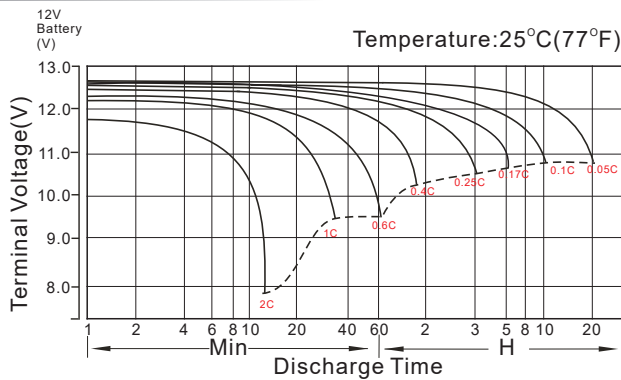
Charge characteristic Curve for standby use



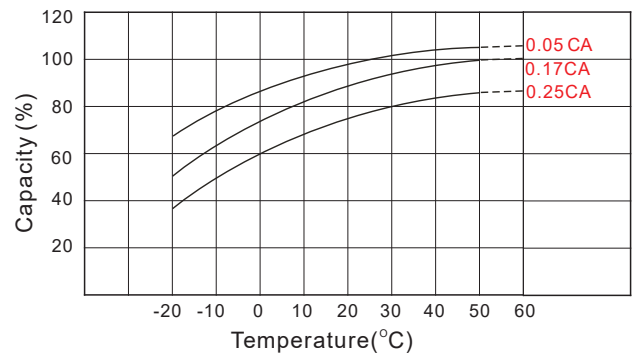
Cycle Life in Relation to Depth of Discharge



Discharge characteristic Curve



Temperature Effects in Relation to Battery Capacity



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