

Specifications

| | | |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Nominal Voltage | 4V | |
| Nominal Capacity (20HR) | 10AH | |
| Dimension | Length | 102mm (4.02 inches) |
| | Width | 50mm (1.97 inches) |
| | Height | 94mm (3.70 inches) |
| | Total Height (with Terminal) | 98mm (3.85 inches) |
| | Approximate Weight | 1.14 kg (2.51 lbs) |
| Battery Type | Valve Regulated Lead-Acid Battery, AGM Design | |
| Terminal Type | T1 | |
| Rated Capacity | 10.1AH | (20hr, 1.75V/cell, 25°C/77°F) |
| | 9.55AH | (10hr, 1.75V/cell, 25°C/77°F) |
| | 8.50AH | (5hr, 1.75V/cell, 25°C/77°F) |
| | 8.46AH | (3hr, 1.60V/cell, 25°C/77°F) |
| | 6.28AH | (1hr, 1.60V/cell, 25°C/77°F) |
| Max. Discharge Current | 150A | |
| Internal Resistance | 9mΩ | |
| Operating Temp. Range | Discharge: | -20°C (-4°F)~50°C (122°F) |
| | Charge: | -20°C (-4°F)~50°C (122°F) |
| | Storage: | -20°C (-4°F)~40°C (104°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) | |
| Container Material | ABS (Option: 94-HB & 94-V0 flame retardant case) | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | SigmasTek SP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter. | |



Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



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

| F.V. (V/cell) \ Discharge Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|--------------------------------|------|-------|-------|-------|------|------|------|------|-------|-------|-------|
| 1.60V | 38.6 | 26.2 | 19.4 | 11.5 | 6.28 | 3.65 | 2.82 | 1.85 | 1.212 | 1.005 | 0.524 |
| 1.65V | 35.0 | 24.2 | 18.1 | 10.9 | 6.22 | 3.50 | 2.73 | 1.79 | 1.200 | 0.994 | 0.521 |
| 1.70V | 31.7 | 22.4 | 17.1 | 10.3 | 6.08 | 3.45 | 2.62 | 1.74 | 1.181 | 0.974 | 0.514 |
| 1.75V | 28.8 | 20.5 | 16.0 | 9.92 | 5.89 | 3.37 | 2.55 | 1.70 | 1.165 | 0.955 | 0.505 |
| 1.80V | 25.6 | 18.7 | 14.6 | 9.56 | 5.63 | 3.25 | 2.50 | 1.66 | 1.145 | 0.930 | 0.500 |
| 1.85V | 19.0 | 14.6 | 12.1 | 8.10 | 5.03 | 2.97 | 2.33 | 1.54 | 1.080 | 0.902 | 0.495 |

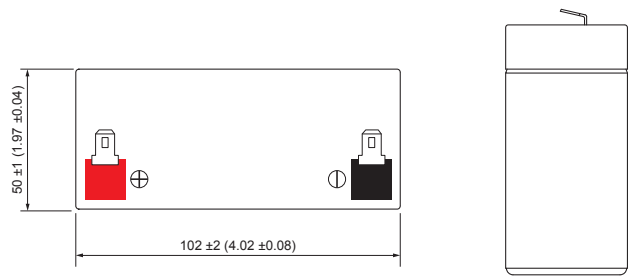
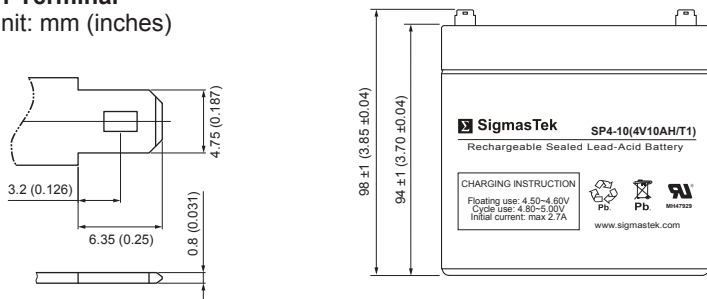
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

| F.V. (V/cell) \ Discharge Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|--------------------------------|------|-------|-------|-------|------|------|------|------|------|------|-------|
| 1.60V | 64.0 | 44.6 | 34.0 | 21.0 | 11.8 | 6.93 | 5.38 | 3.57 | 2.37 | 1.98 | 1.032 |
| 1.65V | 59.4 | 42.0 | 32.3 | 20.0 | 11.8 | 6.67 | 5.24 | 3.47 | 2.35 | 1.96 | 1.027 |
| 1.70V | 54.6 | 39.3 | 30.6 | 19.1 | 11.6 | 6.62 | 5.05 | 3.38 | 2.32 | 1.92 | 1.015 |
| 1.75V | 51.0 | 36.9 | 29.1 | 18.5 | 11.3 | 6.47 | 4.92 | 3.31 | 2.29 | 1.88 | 0.998 |
| 1.80V | 46.2 | 34.1 | 26.9 | 17.9 | 10.8 | 6.26 | 4.85 | 3.23 | 2.25 | 1.84 | 0.989 |
| 1.85V | 34.8 | 27.0 | 22.6 | 15.4 | 9.7 | 5.78 | 4.54 | 3.03 | 2.13 | 1.79 | 0.981 |

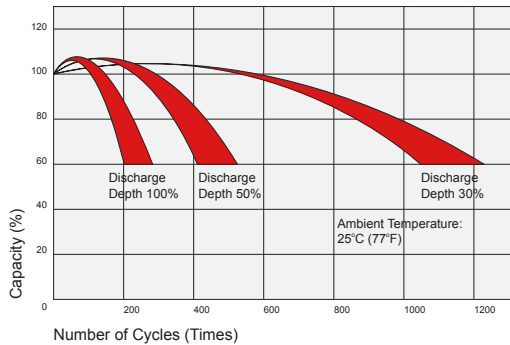
Dimensions

T1 Terminal

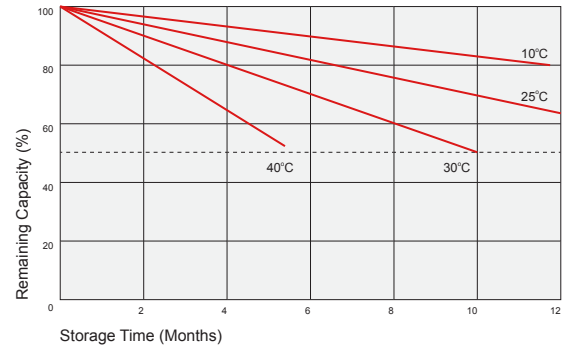
Unit: mm (inches)



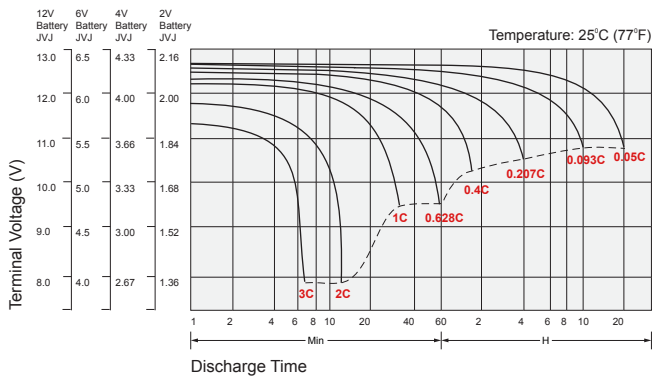
Cycle Service Life



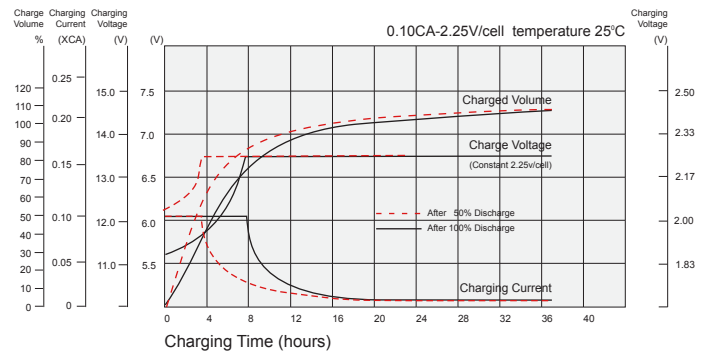
Self Discharge Characteristics



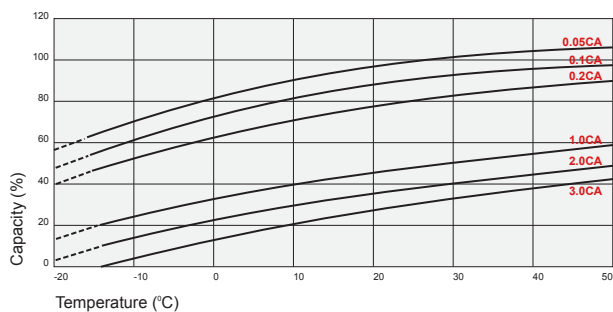
Discharge Characteristics



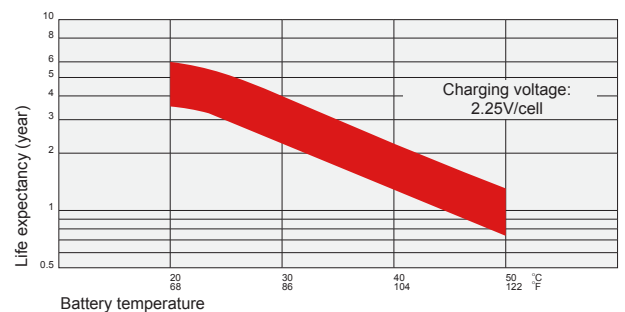
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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