

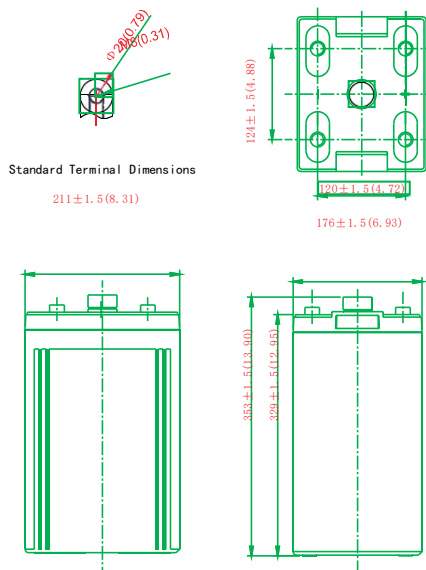


SILICON BATTERY

General Feature

- High Corrosion Resistant Performance: Pb-Ca multi-alloy grid
- Patented Silicate Compound Electrolyte: zero acid vapor, environment friendly
- High Energy Density and Power Density
- Excellent Charge Acceptance Ability
- Strong High and Low Temperature Performance
- Optimized Capability of instant High-current Discharging
- Excellent Deep Discharge Cycle Life
- The Designed Life is 15 Years

Outer Dimension



Specification

| | |
|------------------------------------|--|
| Normal Voltage | 2V |
| Capacity | 400Ah (10hr 、 1.80V、 25°C) |
| Weight | Approx. 25.0kg |
| Internal Resistance | 0.33mΩ |
| Operating Temperature Range | Discharging tempreture: -40°C~60°C |
| | Charging tempreture: -40°C~60°C |
| | Storage tempreture: -40°C~50°C |
| Recommended Operating Temperature | 15°C~25°C |
| Floating Charging Voltage | 2. 25V (25°C) |
| Max Charging Current (Recommended) | 120A |
| Equalization Charging Voltage | 2. 35V (25°C) |
| Self Discharging | Residual Capacity is more than 90% after 90 days @25°C |
| Terminal | M8 |
| Contain Materials | ABS |

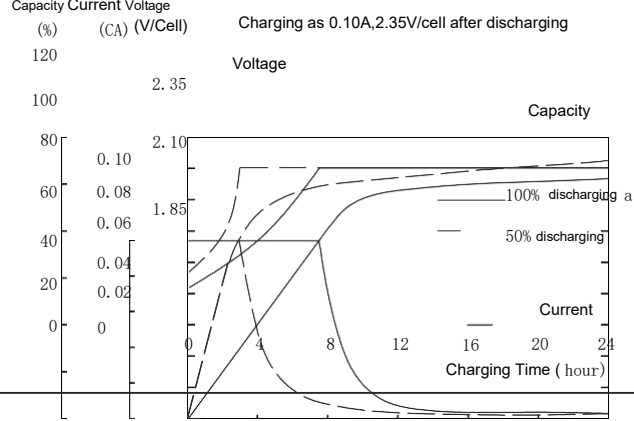
Constant Current Discharge Characteristics Unit: (A, 25°C)

| F.V/Time | 5min | 15min | 30min | 1hour | 2hour | 3hour | 5hour | 8hour | 10hour | 24hour |
|----------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 1.60V | 667 | 558 | 413 | 261 | 154 | 113 | 76.6 | 52.8 | 43.8 | 19.8 |
| 1.65V | 616 | 520 | 396 | 248 | 150 | 110 | 74.8 | 52.0 | 43.4 | 19.6 |
| 1.70V | 576 | 488 | 364 | 237 | 145 | 107 | 74.2 | 51.0 | 42.6 | 19.6 |
| 1.75V | 549 | 462 | 339 | 226 | 140 | 104 | 72.0 | 50.4 | 42.0 | 19.4 |
| 1.80V | 528 | 436 | 317 | 211 | 134 | 101 | 70.4 | 49.6 | 41.2 | 19.0 |
| 1.85V | 467 | 386 | 282 | 191 | 121 | 95.4 | 68.0 | 48.0 | 40.0 | 18.4 |
| 1.90V | 402 | 327 | 242 | 169 | 113 | 89.4 | 65.4 | 46.2 | 38.6 | 18.0 |

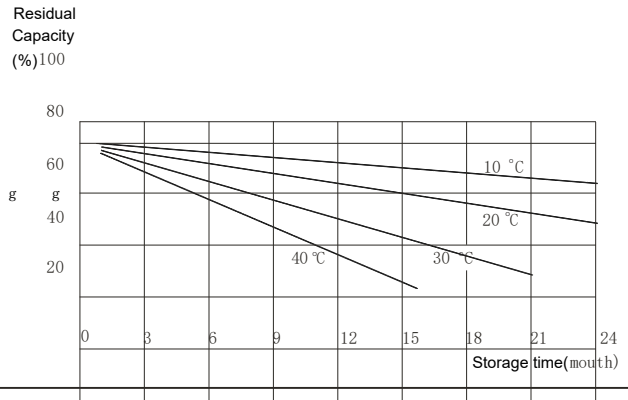
Constant Power Discharge Characteristics Unit:(W 25°C)

| F.V/Time | 5min | 15min | 30min | 1hour | 2hour | 3hour | 5hour | 8hour | 10hour | 24hour |
|----------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 1.60V | 1133 | 949 | 756 | 539 | 347 | 257 | 170 | 113 | 92.6 | 41.8 |
| 1.65V | 1078 | 911 | 715 | 498 | 319 | 242 | 164 | 109 | 90.4 | 41.0 |
| 1.70V | 1036 | 878 | 697 | 474 | 310 | 233 | 160 | 107 | 87.8 | 40.2 |
| 1.75V | 1004 | 845 | 673 | 455 | 299 | 224 | 156 | 103 | 86.4 | 39.8 |
| 1.80V | 976 | 806 | 649 | 445 | 293 | 216 | 152 | 100 | 85.2 | 39.2 |
| 1.85V | 888 | 734 | 578 | 405 | 269 | 205 | 145 | 97.0 | 81.8 | 37.6 |
| 1.90V | 783 | 637 | 487 | 348 | 234 | 190 | 135 | 90.8 | 76.0 | 35.2 |

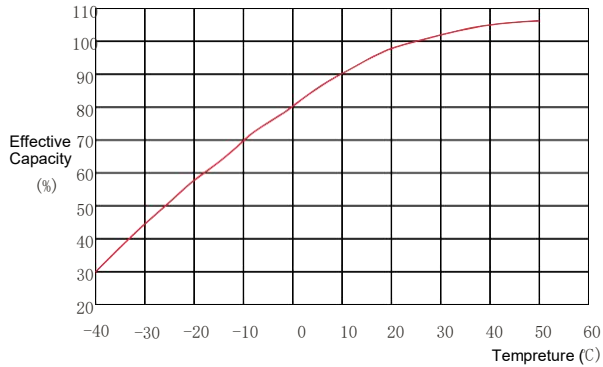
Charging Characteristics Curves



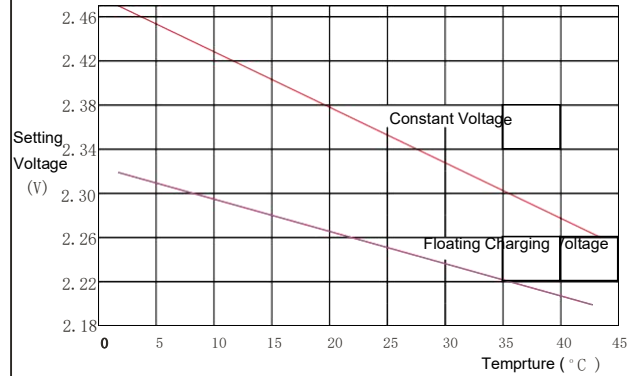
Self-Discharge Characteristics



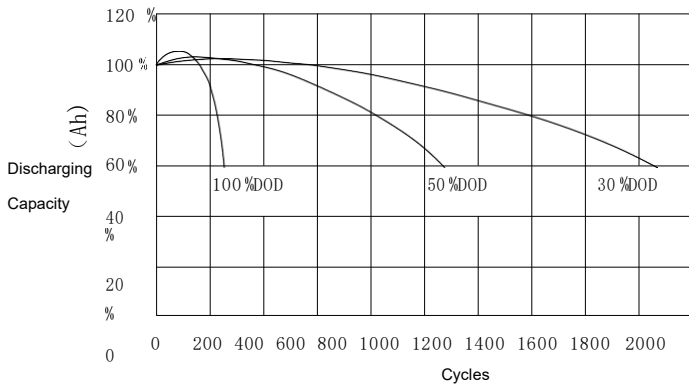
Temperature Vs Capacity



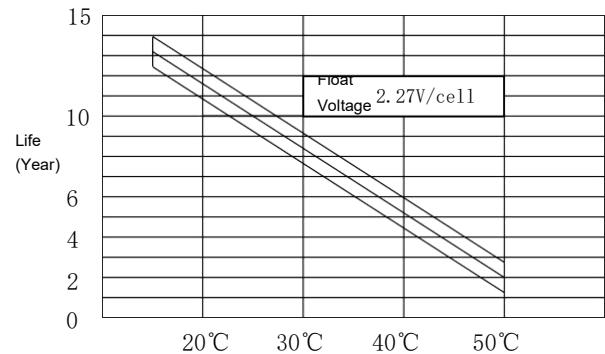
Temperature Vs Voltage Settings



Recycle Life



Temperature VS Float Life



Charging System

| Application Type | Charging Voltage (V) | | | Max Current (A) |
|------------------|----------------------|-----------------|------------|-----------------|
| | Temperature (°C) | Setting Voltage | TEMPCO | |
| Cycle Use | 25 | 2.35 | -5mV/°C/pc | 0.25C |
| Float Use | 25 | 2.25 | -3mV/°C/pc | |

Relationship between Discharging Current and Discharging Voltage

| Discharge Rate | 1hr | 3hr | 8hr | 10hr |
|-------------------------|-------|-------|-------|------|
| Cut-Off Voltage (V) | 1.75 | 1.80 | 1.80 | 1.80 |
| Discharging Current (A) | 0.55C | 0.25C | 0.12C | 0.1C |

