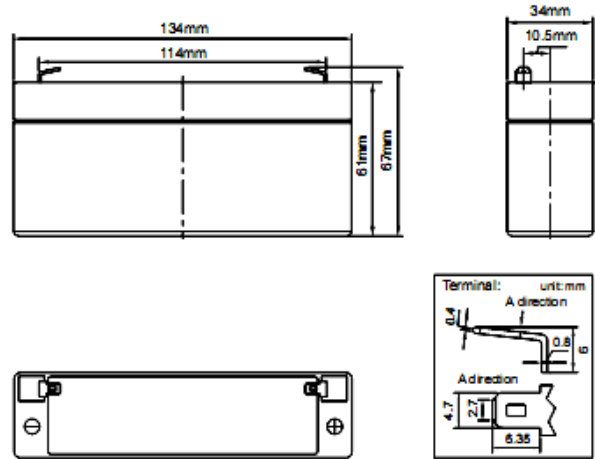


# JAPATOYO® Silicon energy battery □ 3S2.0(6V2.0Ah)

## Product Image



## Product Dimensions



## Characteristics

|  |                           |  |
|--|---------------------------|--|
| Nominal Voltage                                    |                           | 6V   |
| Nominal Capacity (20 hour rate)                    |                           | 2.0Ah  |
| Capacity<br>25°C (77 °F)                           | 10 hour rate (0.19A)      | 1.85Ah   |
|  | 5 hour rate (0.35A)       | 1.77Ah   |
|  | 1 hour rate (1.32A)       | 1.32Ah   |
| Internal Resistance                                | Full Charged Battery 25°C | ≤18mΩ  |
| Capacity affected by<br>Temperature<br>(10 hour )  | 40°C (104 °F)             | 102%   |
|  | 25°C (77 °F)              | 100%   |
|  | 0°C (32 °F)               | 85%  |
|  | -15°C (5 °F)              | 65%  |
| Self-Discharge<br>25°C (77 °F)<br>Capacity         | after 3 month storage     | 90%  |
|  | after 6 month storage     | 80%  |
|  | after 12 month storage    | 62%  |
| Charge<br>(Constant<br>Voltage)<br>25°C<br>(77 °F) | Float                     | Initial Charging Current Less than 1.0A<br>Voltage 6.8-6.9V  |
|  | Cycle                     | Initial Charging Current Less than 1.0A<br>Voltage 7.2-7.45V |

## Packaging

|                       |                 |                |
|-----------------------|-----------------|----------------|
| Battery<br>Dimensions | Length          | 134mm          |
|                       | Width           | 34mm           |
|                       | Height          | 61mm           |
|                       | Total<br>Height | 67mm           |
| Box<br>Dimensions     | Length          | 409mm          |
|                       | Width           | 148mm          |
|                       | Height          | 188mm          |
| Quantity Per Box      |                 | 20 pcs per box |
| Net weight Per Cell   |                 | 0.59kg ±50g    |
| Net weight Per Box    |                 | 11.8kg         |
| Gross Weight          |                 | 12.2kg         |

### Discharge Constant Current per Cell (Amperes at 77°F25°C)

| F.V/Time | 5min  | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h   |
|----------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| 1.60V    | 10.89 | 7.26  | 5.46  | 3.63  | 2.54  | 2.18 | 1.36 | 0.93 | 0.62 | 0.42 | 0.35 | 0.18  |
| 1.65V    | 10.69 | 7.13  | 5.36  | 3.56  | 2.49  | 2.14 | 1.34 | 0.92 | 0.61 | 0.41 | 0.34 | 0.18  |
| 1.70V    | 10.49 | 7.00  | 5.26  | 3.50  | 2.45  | 2.10 | 1.31 | 0.90 | 0.60 | 0.40 | 0.33 | 0.17  |
| 1.75V    | 10.30 | 6.86  | 5.16  | 3.43  | 2.40  | 2.06 | 1.29 | 0.88 | 0.59 | 0.40 | 0.33 | 0.17  |
| 1.80V    | 9.90  | 6.60  | 4.97  | 3.30  | 2.31  | 1.98 | 1.24 | 0.85 | 0.57 | 0.38 | 0.31 | 0.165 |

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

| F.V/Time | 5min  | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60V    | 20.96 | 13.98 | 10.52 | 6.99  | 4.89  | 4.19 | 2.62 | 1.80 | 1.20 | 0.80 | 0.67 | 0.35 |
| 1.65V    | 20.58 | 13.72 | 10.32 | 6.86  | 4.80  | 4.12 | 2.57 | 1.76 | 1.18 | 0.79 | 0.65 | 0.34 |
| 1.70V    | 20.20 | 13.47 | 10.13 | 6.73  | 4.71  | 4.04 | 2.53 | 1.73 | 1.15 | 0.78 | 0.64 | 0.34 |
| 1.75V    | 19.82 | 13.21 | 9.94  | 6.61  | 4.62  | 3.96 | 2.48 | 1.70 | 1.13 | 0.76 | 0.63 | 0.33 |
| 1.80V    | 19.06 | 12.71 | 9.56  | 6.35  | 4.45  | 3.81 | 2.38 | 1.63 | 1.09 | 0.73 | 0.60 | 0.32 |

**Note** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **MCA** for the latest information.

**Performance Characteristics**



**Battery Construction**

|              |                |                |           |       |              |          |            |             |
|--------------|----------------|----------------|-----------|-------|--------------|----------|------------|-------------|
| Component    | Positive plate | Negative plate | Container | Cover | Safety valve | Terminal | Separator  | Electrolyte |
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | Si-Rubber    | Copper   | Fiberglass | Silicon     |