

MATRIX ELECTRÓNICA

SPECIFICATION

For Li-Polymer battery

Model: ~~FCGFI~~ H883650-1650mAh

Type: Pack battery

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| History of revision | Date | Event |
|---------------------|------------|-------|
| 00/00 | 2010-01-08 | |
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1、 Scope:

This description defines the general requirements for the battery's rating parameter, electrical requirement, safety requirement, environmental compatibility, test and judgment, usage instructions, safety regulation, quality evaluation and packaging, marking, storage, shipment and handling, which cellular phone battery with H883650 rechargeable battery cell, adapted for H883650 Digital products

2 . Adopted Standard:

GB/T18287-2000, The People's Republic of China General Regulations of Lithium Ion Battery for Cellular Phone.

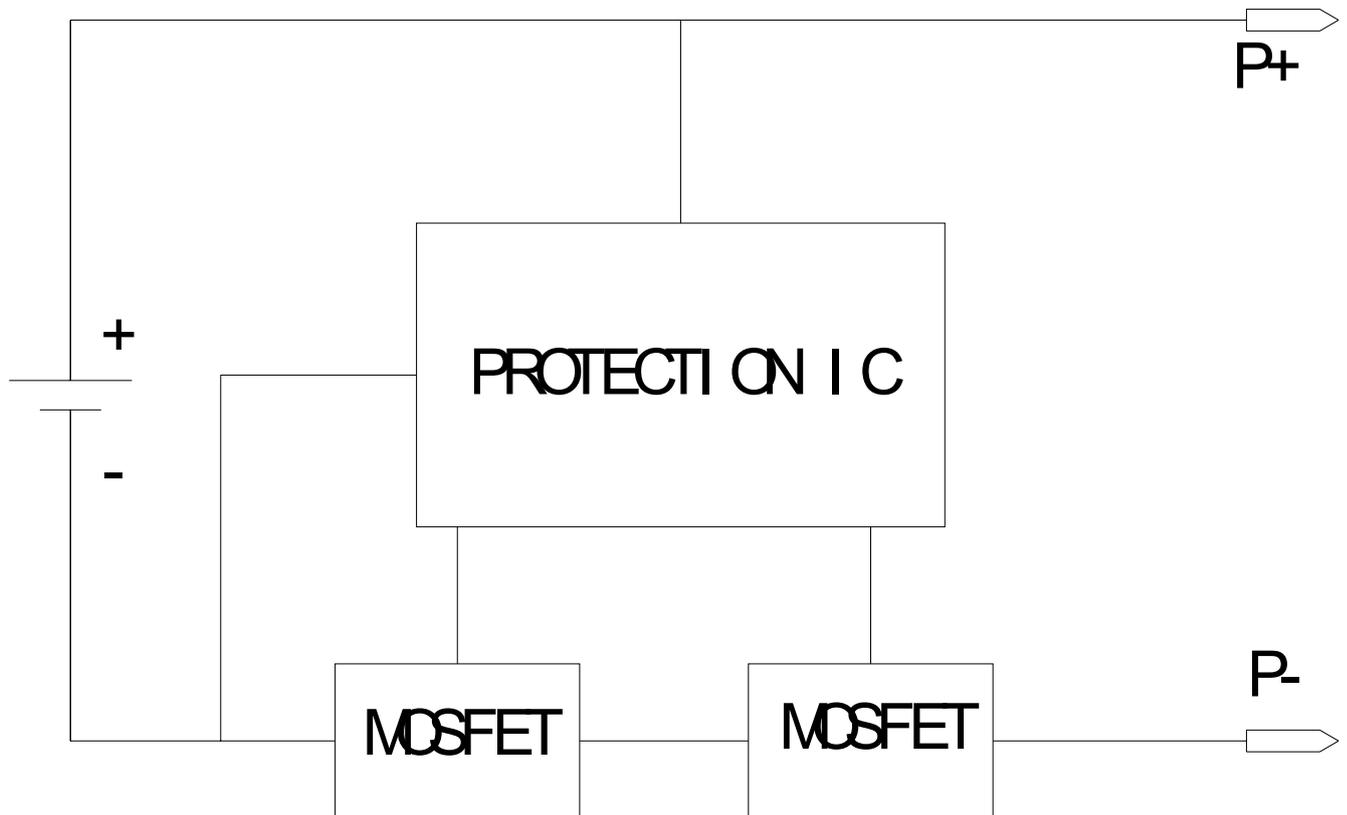
3 . Electrical Characteristics:

| No. | Item | Parameter | | Remark |
|-----|---------------------------------|---|--------------------|---|
| 1 | Rating Voltage | 3.7V | | |
| 2 | Nominal Capacity | Typical min | 1700mAh 1650mAh | 0.2C discharge after full charge. |
| 3 | Charge Voltage | 4.2V±0.05V | | |
| 4 | Impedance | 70mΩ (Max) | | |
| 5 | Charging Mode | C.C/C.V. | | Constant Current /Constant Voltage |
| 6 | Charging Method | 1. Standard Charging 0.2C | | Charging Current330mA |
| | | 2. Fast Charging 1C | | Charging Current1650mA |
| 7 | Charging Time | Standard Charging | 8Hours | |
| | | Fast Charging | 2.5 Hours | |
| 8 | End of Discharge Voltage | 3.0V | | |
| 9 | Overcharge Voltage | 4.23±0.05V | | |
| 10 | Over Discharge Cut Of f Voltage | 2.75±0.05V | | |
| 11 | OverCurrent | 1-4A | | |
| 12 | Short Circuit | Recover after removing the short circuit load | | |
| 13 | Operating Consumption Current | 10 uA (Max) | | |
| 14 | Operating Temperature | Charging | 0~45°C | |
| | | Discharging | -20~60°C | |
| 15 | Storage Temperature | -5°C-35°C Recommend (25±5°C) | | Storage capacity should be 40%~50% full charge capacity |

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| | | | |
|----|-------------|-----------|--|
| 16 | ID Resistor | | |
| 17 | ESD Test | $\pm 4KV$ | |
| 18 | Cycle Life | 500 cycle | |
| 19 | Weight | | |

4 . Battery Frame: (only for reference)



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5 . Main Materials:

Main Material List

| Material | Spec Description | Quantity | Remark | Vendor |
|---------------|--|----------|--------|--------|
| Cell | 883650 | 1PCS | | |
| PCB Board | GG2030 | 1PCS | | |
| Protection IC | G3J | 1PCS | | |
| MOSFET | 8810 | 1PCS | | |
| Wire | With an XH connector(only for reference) | 3PCS | | |
| NTC | 10K mΩ 25°C standard | 1PCS | | |

6 . Reliability Test Criterion:

6. 1 Testing Condition

| | |
|---------------------|-------------|
| Temperature | 20±5 |
| Relative humidity | 60±15% |
| Atmosphere pressure | 86 ~ 106Kpa |

| No. | Item | Standard | Inspecting Method | Remark |
|-----|------------------------------|--|--|--------|
| 1 | High temperature performance | Discharging shall not be less than 51 minutes; and the battery appearance has no deform, no leak-out and no explosion. | When the battery is standard charged at (20±5), it shall be put into a chamber at (55±2)for 2h, then discharged at 1.0C5A constant current to 3.00V | |
| 2 | Low temperature performance | Discharging shall not be less than 36 minutes; and the battery appearance has no deform, no leak-out and no explosion. | When the battery is standard charged at (20±5), it shall be put into chamber at (-10±2)for 16-24h,then discharged at 0.2C5A constant current to 3.00V before it is taken out and put into the temperature of (20±5)for 2h for its appearance check with eyes | |

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| | | | | |
|----|--------------------------------------|---|---|------------------|
| 3 | Electrical load maintenance ability | Discharging shall not be less than 51 minutes | When the battery has completed standard charged, it shall be disconnected and put aside for 28 Days at (20±5) °C, then discharged at 0.2C5A. | |
| 4 | Constant Humidity & Heat Requirement | The battery appearance shall have no distortion, no explosion, no fire, no smoke and no leak-out, and its discharging time should not be less than 36 minutes. | As the battery has completed fast charging with constant current, it shall be put into the (40±5) °C, 90%-95% RH thermos humidistat for 48h; then taken out at (20±5) °C for 2h. Check its appearance with eyes. Obtain its discharging time after it is discharged at 1C5A to its final voltage 3.00V. | |
| 5 | Vibration | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. Battery open voltage should be over 3.6V. | After fully charging, fixing the battery onto the vibration platform. with amplitude 0.38mm circularly scanning vibrating in the frequency of 10HZ-55HZ from three directions X、Y、Z for 30min respectively in its scanning frequency velocity 10CT/min. | |
| 6 | Bump | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. Battery open voltage should be over 3.6V. | After vibration testing, use a clip or directly fix the battery on to the platform in the direction of X、Y、Z vertical complementary axis, then adjust its acceleration and pulse duration as below to have a bump test. Pulse peak acceleration 100m/s ² . Bumps per minute 40-80. Pulse duration 16ms. Bump times 1000±10 | |
| 7 | Free Drop | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. Its internal construction unloosened discharging shall not be less than 51 minutes | After bump testing, the battery shall be immediately dropped from the height of 1000mm (minimum height) onto a 18mm ~ 20mm hard board on the cement floor. Free drop one time respectively from X、Y、Z positive and negative axis(six directions). After that, the battery is discharged at 1C5A to its final voltage. | |
| 8 | Overcharge Protection | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. | When the battery is fully charged, go on loading for 8h with a twice rating voltage, 2.0C5A output current, it starts the over charge protection function. | |
| 9 | Over discharge Protection | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. | The battery is discharged at 0.2C5A in the constant current till it reaches over discharge protection voltage at (20±5) °C, connected with a 30Ω lead and discharged for 24h | Protection first |
| 10 | Short-circuit Protection | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. Battery voltage should not be less than N*3.6V. | As the battery has completed charging, short circuit the positive and negative contacts with 0.1Ω resistor for 1h for appearance check, then disconnect the resistor between the contacts, the battery shall be charged at 1.0C5A mA in the constant current for 5S | |
| 11 | Heavy Collision | Allowing the battery to be deformed, but no explosion and no fire | Putting the battery on the platform, using 9.1KG heavy hammer free drop from 0.6M height onto the fixed battery. | |

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| | | | | |
|----|------------|-------------------------------------|---|--|
| 13 | Cycle Life | its cycles shall be over 300 times. | The battery shall be constantly charged at 1.0C5A in the temperature of (20 ± 5) . When its voltage reaches 4.20V, it shall be charged to constant voltage charging. It shall not stop charging until its current is no more than 0.01C5A .Put it aside for 0.5h-1h then discharge with 1.0C5A in the constant current to its final voltage 3.00V. When the discharging is finished, the battery shall be put aside for 0.5h-1h and has the next charge and discharge recycle. The above recycle test shall be continued unless there are two continuous discharging time less than 36 minutes, which is taken as the end of the life. | |
|----|------------|-------------------------------------|---|--|

7 . General Test Criterion:

7.1 Testing Condition

Temperature -5°C-35°C recommend ($25\pm 5^{\circ}\text{C}$)

Relative humidity 75%

Atmosphere pressure 86 ~ 106Kpa

| No. | Item | Testing Method | Standard | Remark |
|-----|-----------------------------|---|---|---|
| 1 | Appearance | Judging by eyes and Matching cell phone | New battery should be kept clear, no mechanical defects, no rust on the contacts; There should be marking on the battery ;The battery shall be well compatible with the cellular phones. When start the phone, it works in good condition and matched properly. The tolerance of the battery's external size should be within the labeled data of the related drawings. | |
| 2 | 0.2C5A discharging capacity | After fully charging the battery and discharging at 0.2C5A mA | Discharging time is not less than 300minutes. | |
| 3 | Safety performance | Overcharging protection | Battery is charged with DC15V at the highest voltage. When the battery voltage is higher than $(4.28\pm 0.05)\text{V}$, it shall stop charging, its protection startup detention shall be with 0.5S-1.5S. When the battery voltage falls back to 4.0V,it restart to charge. | The battery appearance shall have no distortion, no explosion, no fire, no smoke and no leak-out, |

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| | | | | | |
|---|---------------------|--|--|--|---------------------|
| | | Over discharging protection | When the battery voltage is lower than (3.0±0.05)V, it shall stop charging, its protection startup detention shall be less than 50mS. | The battery appearance shall have no distortion, no explosion, no fire, no smoke and no leak-out, | Charging to release |
| | | Over current protection | Connect the battery positive and negative contacts with a fixed load resistance. When the battery discharging current is over (1-4A), it shall stop and its protection startup detention shall be less than 20mS. | The battery appearance shall have no distortion, no explosion, no fire, no smoke and no leak-out, | |
| | | Short-circuit Protection | As the battery has completed charging, short circuit the positive and negative contacts with 0.1Ω resistor for 1h for appearance check, then disconnect the resistor between the contacts, the battery shall be charged at 1.0C ₅ A mA in the constant current for 5S | The battery appearance has no distortion, no explosion, no fire, no smoke and no leak-out. Battery voltage should not be less than N*3.6V. | 20°C±5°C |
| 4 | Battery Impedance | | New battery should be charged and discharged 2 cycles, and then charging to 50% capacity | ≲ 70mΩ | |
| 5 | Battery Voltage | | New battery should be charged and discharged 2 cycles, and then charging to 50% capacity | ≳ 3.75V | |
| 6 | Battery Capacity | | After fully charging, discharging with 0.2 C ₅ A to the end voltage | ≳ 1650mAh | |
| 7 | Battery ID resistor | | Inspecting the resistor between ID terminal and P-terminal | | |
| 8 | Battery weight | | | | |
| 9 | Battery Size | Inspecting (Length*Width*Thickness) | | Length: Max 52.0mm | |
| | | | | Width: Max 36.5mm | |
| | | | | Thickness: Max 9.0mm | |

7.2 Testing Conditions (unless otherwise specified)

Temperature: 20±5°C

Relative Humidity: 65±20%

Atmospheric pressure: 86~106Kpa

7.3 Appearance

New battery should be kept clear, no mechanical defects, no rust on the contacts; There should be marking on the battery ; The battery shall be well compatible with the cellular phones. When start the phone, it works in good condition and matched properly. The tolerance of the battery's external size should be within the labeled data of the related drawings.

8 . Shipment :

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The battery should be packed in cartons under the condition of half capacity 20-50% for shipment. The violent vibration, impactation or squeezing should be avoided in the transport process; neither is exposed in the sunlight nor rain. The batteries shall be shipped by normal transportation such as by road, by train, by ocean or by air.

9 . **Storage :**

The battery storage shall be in the clean and dry ventilation room at the temperature of $-5 \sim 35^{\circ}\text{C}$ and shall keep out of fire or heat and avoid touching corrosion elements. The batteries shall be charged every 6 months during storage. Both the stored cells in the process of the battery and the batteries in delivery shall be "first come, first use". The battery storage period is 12 months when into the warehouse. Batteries expired must have a thorough check. Only the applicable batteries can be dispatched to the purchaser; the inapplicable ones shall be rechecked, if it remains, the purchaser shall have the right to dispose bad ones.

10 . **Package and Marking :**

10.1 Package

According to the attached

10.2 Marking

Every battery shall have the following Chinese characters : Product、 type、 rating voltage 3.6V、 rating capacity、 contacts plus or minus and warnings、 produce date、 lot No.、 manufacturer、 (or the marks of the above characters)、

11 . **Instructions and Safety Requirement :**

11.1 Recommending Usage

- 11.1.1 Please read the battery instructions and the label on its surface before use.
- 11.1.2 Use the battery indoors under normal condition , temperature : (20 ± 5) $^{\circ}\text{C}$, absolute humidity : $65 \pm 20\%$
- 11.1.3 When in use, the battery shall be kept out of heat、 high voltage and avoided children's touching. Do not drop the battery.
- 11.1.4 Use the compatible charger. Do not put the battery into the charger over 24hours。
- 11.1.5 Do not touch contacts together. Do not demolish or assembly the battery by yourself. Do not put the battery in the damp place to avoid danger.
- 11.1.6 When the battery was stored for a long period, put it well in its half capacity. Do not wrap it with conduct material to avoid the damage caused by the direct contact between the metal and battery. Keep the battery in day places。
- 11.1.7 Well disposed the disused battery. Do not put it into fire or water.

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11.2 Hazard Warning

11.2.1 Forbid Disassemble Batteries

The battery has protective component and circuit internally to avoid danger. Mishandling such as improper disassembly will destroy its protective function and make it heat, smoke, distort or burning.

11.2.2 Forbid Short-circuit Batteries

Do not touch the plus and minus contacts with metals. Do not put the battery with metal element together in either storage or movement. If the battery is short-circuit, it carries magnified current , which will cause damage and make the battery heat, smoke, distort or burning.

11.2.3 Forbid heat and burn the battery

If heating or burning the battery, it will caused the isolated element in the battery dissolved, protection function stopped or the electrode burning, over heated, which will make the battery heat, smoke, distort or burning.

11.2.4 To avoid use the battery near the heat

Do not use the battery near the fire and stove, or over 80°, and over heating will cause the battery internal short-circuit and make it heat, smoke, distort or burning.

11.2.5 Forbid bathing the battery

Do not dampen the battery, or even immerse it in the water, which will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

11.2.6 Avoid charging near fire or in the sunlight

Otherwise, it will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

11.2.7 Danger in using non-indicated chargers in

Charging in abnormal condition, the battery will cause internal protection circuit and its function lost or abnormal chemical reactions, which will lead to heating, smoking, distortion or burning.

11.2.8 Forbid Damage Battery

Do not allow damage the battery with the metals gouged, forged or dropped etc. , otherwise, it will cause over-heated, distort, smoke or burning, even in danger.

11.2.9 Forbid directly welding on the battery

Over-heated will cause the isolated element dissolved in the battery and losing protective function its cycle life, even will cause over-heated, distort, smoke or burning.

11.2.10 Forbid directly charging on the power socket or car kit cigarette.

High voltage and amplified current will damage the battery and reduce its cycle life, even will cause over-heated, distort, smoke or burning.

11.2.11 Do not use this battery for other equipment

Improprate usage will damage the battery and reduce its cycle life, even will cause over-heated, distort, smoke or burning.

11.2.12 Do not touch the leak-out battery

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The leak-out electrolyte will cause the skin uncomfortable. If it drops into eyes, do not rob the eyes but wash in time, and go to hospital for treatment.

11.3 Warning

11.3.1 Do not mix with other battery

This battery cannot mix with deposal or twice- recycled batteries in use. Otherwise, for its abnormal charge and discharge, it will cause over-heated, distort, smoke or burning.

11.3.2 Keep the battery out of children's reach and prevent them biting or swallowing the battery.

11.3.3 Do not insert the battery onto the charger for a long time

If charging beyond the normal time, the battery is still in the charger, please stop charging. The abnormal charging will cause battery over-heated, distort, smoke or burning.

11.3.4 Do not put into microwave stove or any other pressure apparatus

Take the battery away from the cellular phone or the charger if it is instant heated or leak-out (or odors) and depose it. The bad battery will causes over-heated, smoke or burning.

11.4 Cautions

13.4.1 Notice

The battery shall be prevented to be exposed in effulgence so as not to cause over-heated, distort, smoke and weaken its performance and cycle life.

13.4.2 Electro Static-free

There is a protective circuit inside the battery to prevent contingency. Do not use the battery in the Electro static circumstances, (above 1000V), for it is easily destroyed the circuit board so that the battery doses not work and causes over-heated, distort, smoke or burning.

13.4.3 Discharging Temperature Range

Recommended discharging temperature range is 0-40 $^{\circ}$ C, beyond which it will result in decadence of the battery performance and shortness of its life.

13.4.4 Read carefully the manual before use or whenever in need.

13.4.5 Charging Method

Use the special chargers in the recommended charging method to charge the battery.

13.4.6 First Usage

When you use the battery for its first time, do not put it into the cellular phone or any other equipment once you find it in unusual conditions such as unclearness or odors. The battery should be returned to the vendor.

13.4.7 Children Use

When Children use the battery, they should be under their parents' instructions and superintend in use.

13.4.8 Avoid Children's Touch

Battery should keep out of the place where children in reach. Prevent children taking the battery out of the charger or the cellular phone to play.

13.4.9 To avoid the leak-out liquid be exposed to the skin or clothes. If touched, please wash by clean water so as not to cause

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the skin uncomfortable

13.4.10 Consultation

When you buy the battery, please note how to contact with the vendors, so that you may get in touch with vendors for consultation whenever in need.

13.4.11 Guarantee period

Guarantee is one year since it is out of the factory. Life time:300 cycles。 Any damage by incorrect use and not quality problem, even in its guarantee period, free service won't be provided by the manufacture.

13.4.12 Safety Usage Guarantee

If the battery is used on other instruments, please contact with your manufacturer for how to get the best performance, at least consult its maximum current, fast charge and special application.

12 . **Quality Evaluation Programme :**

Quality evaluation composes of authoritative check and quality consistence check.

Authoritative check is carried out on design decision, emended design and production decision. It should be confirmed by both Purchaser and Vendor on sampling proposal, check project, sequence and judgment etc., which in principle, should be all included.

Quality consistence check should be divided into lot by lot check-up and periodical check-up, as to test the quality steadiness during the products in production (refer to GB2828—1987 standard)。 The detailed check-ups compose of appearance, internal resistance, rating capacity or 1C₅A discharging capacity etc.

13 . **Environment Protection :**

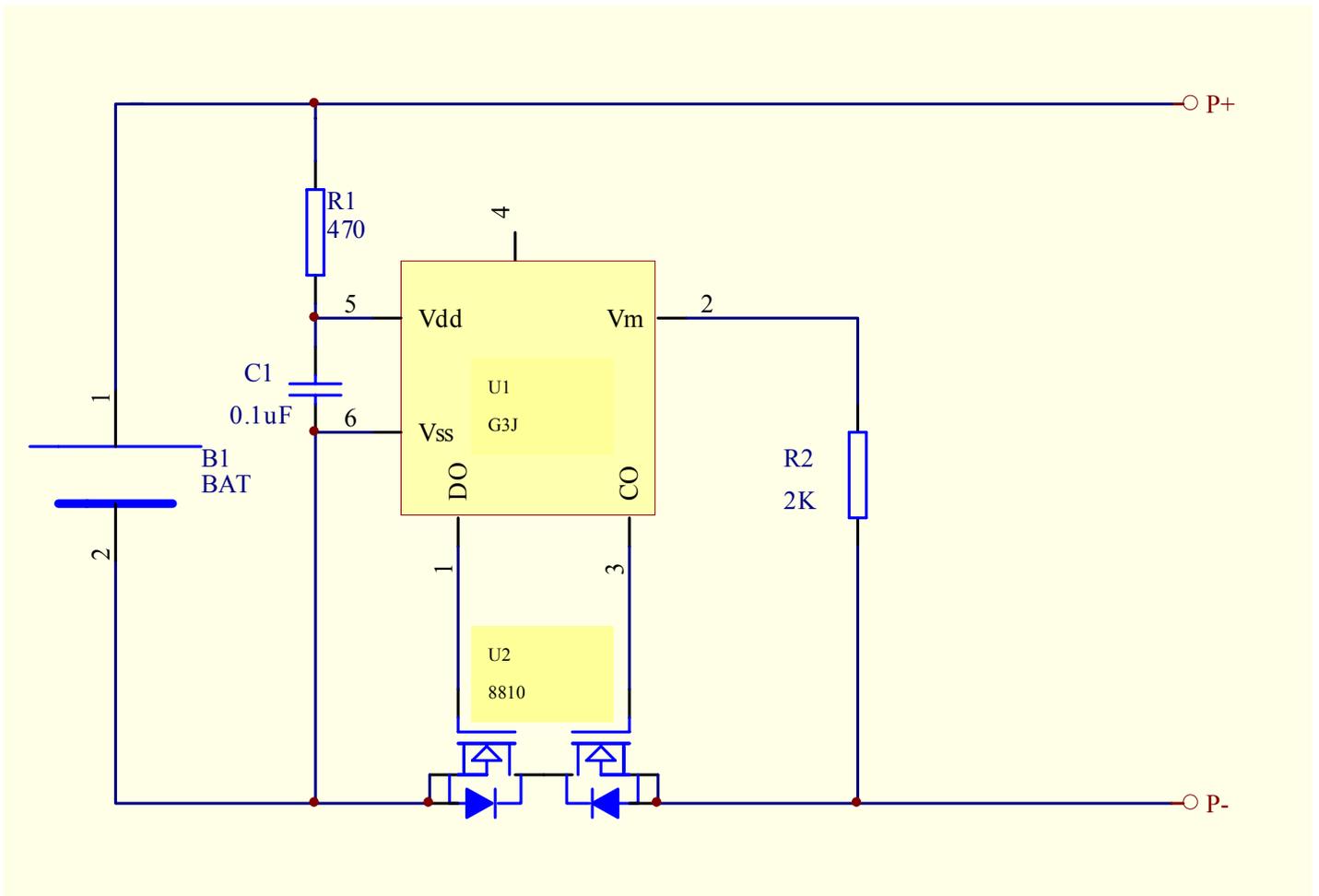
This product accord with ROHS requirement

14 . **Others :**

All the above are the agreed the battery descriptions and test regulation between Purchaser and Vendor. It can be carried out if there is no any new written agreement or modification notice occurred.

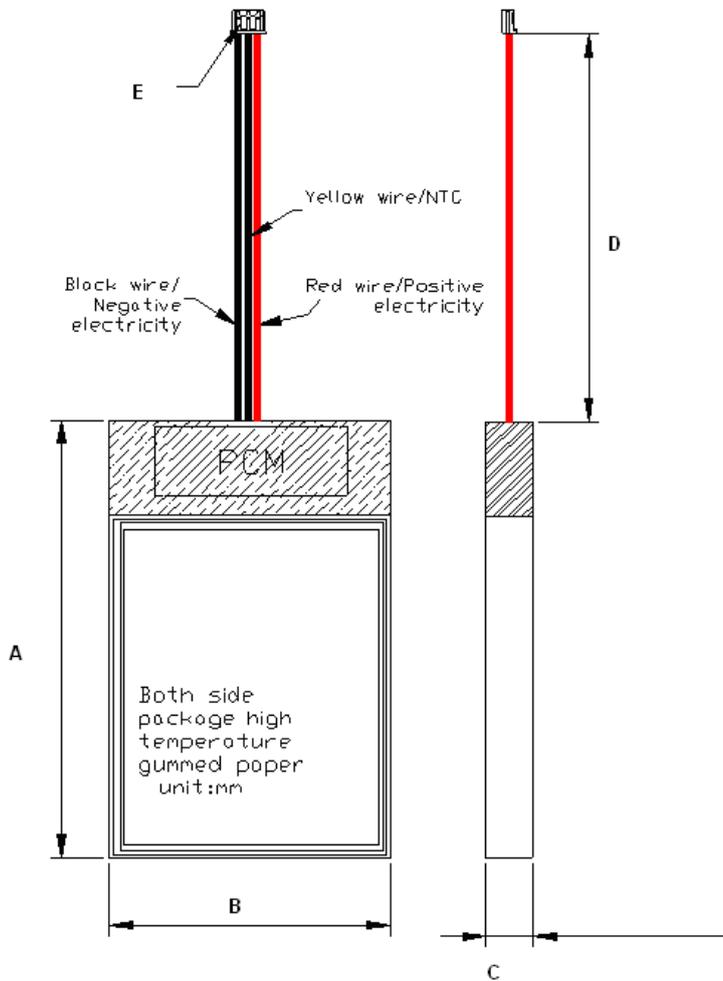
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1 . Schematic of the PCB



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2 . Outline drawing



| Item | Description | Dimension and specification |
|------|----------------|-----------------------------|
| A | Thickness | 8.8.00~9.1mm |
| B | Width | 36.00~36.50mm |
| C | Length | 50.00~52.00mm |
| D | Cable length | 100mm |
| E | Connector Type | Oupiin 4573-03H 1:Neg |
| Cap | Capacity | 1650mAh |
| Imp | Impedance | 70mΩ Max |
| V | Voltage | 3.78~3.85V |

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OTROS MODELOS DE BATERÍAS DE POLÍMERO DE ION-LITIO

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|---------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 1 | 1 | XX1147 | 501147 | 235 | 220 | 3.7V | 4.8 | 11.0 | 46.7 | 5.0 | 140 |
| 2 | | | 601147 | 300 | 280 | 3.7V | 5.8 | 11.0 | 46.7 | 6.5 | 85 |
| 3 | 2 | XX1119 | 251119 | 50 | 45 | 3.7V | 2.3 | 11.0 | 18.7 | 2.0 | 450 |
| 4 | 3 | XX1129 | 301129 | 75 | 70 | 3.7V | 2.8 | 11.0 | 28.7 | 2.5 | 350 |
| 5 | | | 401129 | 105 | 100 | 3.7V | 3.8 | 11.0 | 28.7 | 3.0 | 250 |
| 6 | 4 | XX1211 | 451211 | 35 | 30 | 3.7V | 4.3 | 12.0 | 10.7 | 1.3 | 550 |
| 7 | 5 | XX1225 | 501225 | 120 | 110 | 3.7V | 4.8 | 12.0 | 24.7 | 3.0 | 250 |
| 8 | | | 401230 | 105 | 100 | 3.7V | 4.0 | 12.2 | 30.0 | 2.7 | 250 |
| 9 | 6 | XX1230 | 451230 | 130 | 120 | 3.7V | 4.3 | 12.0 | 29.7 | 3.0 | 120 |
| 10 | | | 501230 | 150 | 140 | 3.7V | 4.8 | 12.0 | 29.7 | 3.5 | 200 |
| 11 | 7 | XX1235 | 401235 | 140 | 130 | 3.7V | 3.8 | 12.0 | 34.7 | 3.5 | 200 |
| 12 | | | 431235 | 145 | 135 | 3.7V | 4.1 | 12.0 | 34.7 | 3.0 | 200 |
| 13 | | | 501235 | 170 | 160 | 3.7V | 4.8 | 12.0 | 34.7 | 3.5 | 200 |
| 14 | | | 541235 | 185 | 170 | 3.7V | 5.2 | 12.0 | 34.7 | 3.5 | 200 |
| 15 | | | 601235 | 215 | 200 | 3.7V | 5.8 | 12.0 | 34.7 | 4.5 | 140 |
| 16 | | | 701235 | 250 | 230 | 3.7V | 6.8 | 12.0 | 34.7 | 6.0 | 120 |
| 17 | | | 381245 | 140 | 135 | 3.7V | 3.8 | 12.0 | 45.0 | 3.4 | 150 |
| 18 | 8 | XX1245 | 501245 | 230 | 210 | 3.7V | 5.0 | 12.0 | 45.0 | 4.6 | 150 |
| 19 | | | 601245 | 260 | 250 | 3.7V | 6.0 | 12.0 | 45.0 | 5.4 | 120 |
| 20 | 9 | XX1247 | 601247 | 300 | 280 | 3.7V | 5.8 | 12.0 | 46.7 | 7.5 | 100 |
| 21 | 10 | XX1427 | 401427 | 130 | 120 | 3.7V | 3.8 | 13.8 | 26.7 | 3.0 | 200 |
| 22 | | | 251430 | 65 | 60 | 3.7V | 2.3 | 13.8 | 29.7 | 2.0 | 400 |
| 23 | 11 | XX1430 | 361430 | 120 | 110 | 3.7V | 3.4 | 13.8 | 29.7 | 3.0 | 250 |
| 24 | | | 401430 | 130 | 120 | 3.7V | 3.8 | 13.8 | 29.7 | 3.0 | 200 |
| 25 | | | 401430H | 150 | 140 | 3.7V | 3.8 | 13.8 | 29.7 | 3.5 | 200 |
| 26 | | | 431430 | 150 | 140 | 3.7V | 4.1 | 13.8 | 29.7 | 3.5 | 200 |
| 27 | | | 501430 | 165 | 155 | 3.7V | 4.8 | 13.8 | 29.7 | 4.0 | 150 |
| 28 | | | 541430 | 195 | 180 | 3.7V | 5.2 | 13.8 | 29.7 | 4.0 | 150 |
| 29 | | | 601430 | 205 | 190 | 3.7V | 6.0 | 14.0 | 30.0 | 4.1 | 150 |
| 30 | 12 | XX1432 | 421432 | 140 | 130 | 3.7V | 4.0 | 13.8 | 31.7 | 3.0 | 200 |

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| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|--------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 31 | | | 301445 | 115 | 110 | 3.7V | 3.0 | 14.0 | 45.0 | 3.8 | 180 |
| 32 | 13 | XX1445 | 401445 | 175 | 170 | 3.7V | 4.0 | 14.0 | 45.0 | 3.9 | 150 |
| 33 | | | 601445 | 310 | 300 | 3.7V | 6.0 | 14.0 | 45.0 | 7.0 | 90 |
| 34 | 14 | XX1522 | 401522 | 95 | 90 | 3.7V | 3.8 | 14.8 | 21.7 | 2.0 | 280 |
| 35 | | | 551522 | 130 | 120 | 3.7V | 5.3 | 14.8 | 21.7 | 3.0 | 200 |
| 36 | 15 | XX1528 | 401528 | 105 | 100 | 3.7V | 4.0 | 15.0 | 28.0 | 2.4 | 160 |
| 37 | | | 401546 | 260 | 240 | 3.7V | 3.8 | 14.8 | 45.7 | 5.0 | 100 |
| 38 | 16 | XX1546 | 431546 | 290 | 270 | 3.7V | 4.1 | 14.8 | 45.7 | 6.5 | 120 |
| 39 | | | 501546 | 345 | 320 | 3.7V | 4.8 | 14.8 | 45.7 | 7.0 | 100 |
| 40 | | | 601546 | 410 | 380 | 3.7V | 5.8 | 14.8 | 45.7 | 7.0 | 70 |
| 41 | 17 | XX1612 | 351612 | 45 | 40 | 3.7V | 3.3 | 15.8 | 11.7 | 1.5 | 500 |
| 42 | | | 541612 | 75 | 70 | 3.7V | 5.2 | 15.8 | 11.7 | 2.5 | 300 |
| 43 | 18 | XX1628 | 401628 | 150 | 140 | 3.7V | 3.8 | 15.8 | 27.7 | 3.0 | 200 |
| 44 | | | 401640 | 235 | 220 | 3.7V | 3.8 | 15.8 | 39.7 | 4.5 | 100 |
| 45 | 19 | XX1640 | 501640 | 300 | 280 | 3.7V | 4.8 | 15.8 | 39.7 | 6.0 | 100 |
| 46 | | | 601640 | 365 | 340 | 3.7V | 5.8 | 15.8 | 39.7 | 7.5 | 100 |
| 47 | | | 401730 | 165 | 160 | 3.7V | 4.0 | 17.0 | 30.0 | 3.7 | 180 |
| 48 | 20 | XX1730 | 451730 | 190 | 175 | 3.7V | 4.5 | 17.0 | 30.0 | 4.1 | 150 |
| 49 | | | 501730 | 215 | 200 | 3.7V | 4.8 | 16.7 | 29.7 | 4.5 | 140 |
| 50 | | | 601730 | 270 | 250 | 3.7V | 5.8 | 16.7 | 29.7 | 5.5 | 120 |
| 51 | | | 401733 | 185 | 170 | 3.7V | 3.8 | 16.7 | 32.7 | 3.5 | 150 |
| 52 | 21 | XX1733 | 501733 | 250 | 230 | 3.7V | 4.8 | 16.7 | 32.7 | 4.5 | 130 |
| 53 | | | 601733 | 300 | 280 | 3.7V | 5.8 | 16.7 | 32.7 | 6.0 | 90 |
| 54 | 22 | XX1741 | 501741 | 300 | 280 | 3.7V | 5.0 | 17.0 | 41.0 | 6.8 | 120 |
| 55 | | | 361745 | 260 | 240 | 3.7V | 3.4 | 16.7 | 44.7 | 4.5 | 100 |
| 56 | | | 401745 | 260 | 250 | 3.7V | 4.0 | 17.0 | 45.0 | 5.6 | 120 |
| 57 | 23 | XX1745 | 471745 | 310 | 300 | 3.7V | 4.7 | 17.0 | 45.0 | 6.0 | 80 |
| 58 | | | 501745 | 330 | 320 | 3.7V | 5.0 | 17.0 | 45.0 | 6.7 | 80 |
| 59 | | | 601745 | 390 | 380 | 3.7V | 6.0 | 17.0 | 45.0 | 7.8 | 80 |
| 60 | | | 361747 | 270 | 250 | 3.7V | 3.4 | 16.7 | 46.7 | 4.5 | 120 |
| 61 | 24 | XX1747 | 471747 | 365 | 340 | 3.7V | 4.5 | 16.7 | 46.7 | 6.5 | 80 |
| 62 | | | 541747 | 410 | 380 | 3.7V | 5.2 | 16.7 | 46.7 | 7.0 | 80 |
| 63 | | | 601747 | 485 | 450 | 3.7V | 5.8 | 16.7 | 46.7 | 9.5 | 80 |
| 64 | 25 | XX1748 | 501748 | 390 | 360 | 3.7V | 4.8 | 16.7 | 47.7 | 7.0 | 100 |
| 65 | | | 571748 | 465 | 430 | 3.7V | 5.5 | 16.7 | 47.7 | 9.5 | 80 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage | Dimensions (mm) | | | Weight Approx. | Internal Impedance |
|-----|----------|--------------|--------|---------------|---------------|-----------------|------------------|--------------|---------------|----------------|--------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 66 | | | 451753 | 360 | 350 | 3.7V | 4.5 | 16.5 | 52.5 | 7.6 | 80 |
| 67 | 26 | XX1753 | 551753 | 430 | 420 | 3.7V | 5.4 | 16.5 | 52.5 | 8.7 | 70 |
| 68 | | | 601753 | 515 | 480 | 3.7V | 6.0 | 17.0 | 53.0 | 10.0 | 80 |
| 69 | 27 | XX1828 | 601828 | 220 | 200 | 3.7V | 6.0 | 18.0 | 28.0 | 5.0 | 150 |
| 70 | 28 | XX1838 | 501838 | 325 | 300 | 3.7V | 4.8 | 17.7 | 37.7 | 7.0 | 85 |
| 71 | 29 | XX1840 | 501840 | 345 | 320 | 3.7V | 4.8 | 17.7 | 39.7 | 7.0 | 100 |
| 72 | 30 | XX1854 | 541854 | 540 | 500 | 3.7V | 5.2 | 17.7 | 53.7 | 11.5 | 80 |
| 73 | 31 | XX1935 | 401935 | 235 | 220 | 3.7V | 3.8 | 18.7 | 34.7 | 5.0 | 120 |
| 74 | | | 401939 | 230 | 220 | 3.7V | 4.0 | 19.0 | 38.0 | 5.2 | 85 |
| 75 | 32 | XX1939 | 651939 | 410 | 400 | 3.7V | 6.5 | 19.0 | 38.0 | 8.0 | 80 |
| 76 | | | 232023 | 65 | 60 | 3.7V | 2.1 | 19.7 | 22.7 | 2.5 | 400 |
| 77 | | | 382023 | 130 | 120 | 3.7V | 3.8 | 20.0 | 23.0 | 3.0 | 180 |
| 78 | 33 | XX2023 | 402023 | 140 | 130 | 3.7V | 3.8 | 19.7 | 22.7 | 3.0 | 200 |
| 79 | | | 502023 | 185 | 170 | 3.7V | 4.8 | 19.7 | 22.7 | 4.0 | 150 |
| 80 | | | 622023 | 225 | 210 | 3.7V | 6.0 | 19.7 | 22.7 | 5.0 | 120 |
| 81 | | | 302025 | 110 | 105 | 3.7V | 3.0 | 20.2 | 25.0 | 2.7 | 250 |
| 82 | | | 402025 | 150 | 140 | 3.7V | 4.0 | 20.0 | 25.0 | 3.0 | 180 |
| 83 | 34 | XX2025 | 422025 | 155 | 140 | 3.7V | 4.2 | 20.0 | 25.0 | 3.4 | 150 |
| 84 | | | 502025 | 185 | 180 | 3.7V | 5.0 | 20.0 | 25.0 | 3.8 | 120 |
| 85 | | | 602025 | 245 | 230 | 3.7V | 6.0 | 20.0 | 25.0 | 4.8 | 120 |
| 86 | | | 262030 | 120 | 110 | 3.7V | 2.4 | 19.7 | 29.7 | 3.0 | 250 |
| 87 | | | 302030 | 125 | 120 | 3.7V | 3.0 | 20.0 | 30.0 | 3.1 | 150 |
| 88 | | | 332030 | 160 | 150 | 3.7V | 3.1 | 19.7 | 29.7 | 3.5 | 180 |
| 89 | 35 | XX2030 | 362030 | 180 | 170 | 3.7V | 3.4 | 19.7 | 29.7 | 3.5 | 150 |
| 90 | | | 382030 | 185 | 170 | 3.7V | 3.8 | 20.0 | 30.0 | 4.8 | 120 |
| 91 | | | 402030 | 195 | 190 | 3.7V | 4.0 | 20.0 | 30.0 | 4.0 | 120 |
| 92 | | | 432030 | 215 | 200 | 3.7V | 4.1 | 19.7 | 29.7 | 4.0 | 110 |
| 93 | | | 452030 | 215 | 210 | 3.7V | 4.5 | 20.0 | 30.0 | 4.5 | 110 |
| 94 | | | 482030 | 240 | 230 | 3.7V | 4.8 | 20.0 | 30.0 | 5.0 | 110 |
| 95 | | | 502030 | 250 | 240 | 3.7V | 5.0 | 20.0 | 30.0 | 5.3 | 110 |
| 96 | 35 | XX2030 | 552030 | 300 | 270 | 3.7V | 5.5 | 20.0 | 30.0 | 6.2 | 120 |
| 97 | | | 582030 | 320 | 300 | 3.7V | 5.8 | 20.0 | 30.0 | 5.9 | 140 |
| 98 | | | 602030 | 345 | 320 | 3.7V | 6.0 | 20.0 | 30.0 | 7.0 | 110 |
| 99 | | | 672030 | 365 | 340 | 3.7V | 6.5 | 19.7 | 29.7 | 7.0 | 120 |
| 100 | | | 352035 | 210 | 200 | 3.7V | 3.5 | 20.0 | 35.0 | 4.5 | 150 |
| 101 | | | 382035 | 215 | 210 | 3.7V | 3.8 | 20.0 | 35.0 | 4.8 | 100 |
| 102 | | | 402035 | 240 | 230 | 3.7V | 4.0 | 20.0 | 35.0 | 4.9 | 120 |
| 103 | | | 432035 | 260 | 250 | 3.7V | 4.1 | 19.7 | 34.7 | 5.0 | 100 |
| 104 | | | 452035 | 270 | 250 | 3.7V | 4.5 | 20.0 | 35.0 | 5.5 | 120 |
| 105 | 36 | XX2035 | 502035 | 310 | 300 | 3.7V | 5.0 | 20.0 | 35.0 | 6.1 | 120 |
| 106 | | | 552035 | 340 | 330 | 3.7V | 5.5 | 20.0 | 35.0 | 7.0 | 100 |
| 107 | | | 582035 | 350 | 340 | 3.7V | 5.8 | 20.0 | 35.0 | 6.6 | 80 |
| 108 | | | 602035 | 410 | 380 | 3.7V | 5.8 | 19.7 | 34.7 | 7.0 | 80 |
| 109 | | | 652035 | 430 | 400 | 3.7V | 6.3 | 19.7 | 34.7 | 8.0 | 80 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|--------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 110 | | | 302040 | 215 | 200 | 3.7V | 2.8 | 19.7 | 39.7 | 5.0 | 120 |
| 111 | | | 402040 | 290 | 270 | 3.7V | 3.8 | 19.7 | 39.7 | 7.0 | 90 |
| 112 | 37 | XX2040 | 452040 | 325 | 300 | 3.7V | 4.5 | 20.0 | 40.0 | 6.5 | 120 |
| 113 | | | 502040 | 375 | 350 | 3.7V | 4.8 | 19.7 | 39.7 | 8.0 | 100 |
| 114 | | | 602040 | 465 | 430 | 3.7V | 6.0 | 20.0 | 40.0 | 8.8 | 80 |
| 115 | 38 | XX2045 | 402045 | 345 | 320 | 3.7V | 3.8 | 19.7 | 44.7 | 7.0 | 80 |
| 116 | | | 432045 | 375 | 350 | 3.7V | 4.1 | 19.7 | 44.7 | 8.0 | 100 |
| 117 | 39 | XX2050 | 552050 | 560 | 520 | 3.7V | 5.3 | 19.7 | 49.7 | 13.0 | 60 |
| 118 | 40 | XX2054 | 582054 | 580 | 560 | 3.7V | 5.8 | 20.0 | 54.0 | 11.5 | 50 |
| 119 | 41 | XX2060 | 402060 | 465 | 450 | 3.7V | 4.0 | 20.0 | 60.0 | 9.5 | 80 |
| 120 | 42 | XX2223 | 402223 | 145 | 140 | 3.7V | 4.0 | 22.0 | 23.0 | 3.1 | 180 |
| 121 | | | 502223 | 170 | 160 | 3.7V | 5.0 | 22.0 | 23.0 | 3.6 | 150 |
| 122 | 43 | XX2225 | 362225 | 140 | 130 | 3.7V | 3.4 | 21.7 | 24.7 | 3.0 | 180 |
| 123 | | | 382225 | 150 | 140 | 3.7V | 3.6 | 21.7 | 24.7 | 4.0 | 200 |
| 124 | 44 | XX2230 | 162230 | 75 | 70 | 3.7V | 1.4 | 21.7 | 29.7 | 4.0 | 300 |
| 125 | 45 | XX2233 | 502233 | 325 | 300 | 3.7V | 5.0 | 22.0 | 33.0 | 6.9 | 120 |
| 126 | | | 472235 | 325 | 300 | 3.7V | 4.5 | 21.7 | 34.7 | 7.0 | 100 |
| 127 | 46 | XX2235 | 502235 | 355 | 330 | 3.7V | 4.8 | 21.7 | 34.7 | 7.0 | 80 |
| 128 | | | 582235 | 430 | 400 | 3.7V | 5.6 | 21.7 | 34.7 | 9.0 | 80 |
| 129 | | | 742235 | 560 | 520 | 3.7V | 7.2 | 21.7 | 34.7 | 13.0 | 60 |
| 130 | | | 302236 | 180 | 170 | 3.7V | 3.0 | 22.0 | 36.0 | 4.1 | 150 |
| 131 | 47 | XX2236 | 502236 | 380 | 365 | 3.7V | 5.0 | 22.0 | 36.0 | 7.4 | 80 |
| 132 | | | 602236 | 415 | 400 | 3.7V | 6.0 | 22.0 | 36.0 | 8.3 | 75 |
| 133 | 48 | XX2239 | 482239 | 360 | 350 | 3.7V | 4.7 | 21.0 | 39.0 | 7.3 | 100 |
| 134 | | | 302248 | 250 | 240 | 3.7V | 3.0 | 22.0 | 48.0 | 5.8 | 100 |
| 135 | 49 | XX2248 | 402248 | 360 | 350 | 3.7V | 4.0 | 22.0 | 48.0 | 8.0 | 85 |
| 136 | | | 502248 | 485 | 470 | 3.7V | 5.0 | 22.0 | 48.0 | 10.0 | 75 |
| 137 | | | 602248 | 545 | 530 | 3.7V | 6.0 | 22.0 | 48.0 | 10.5 | 65 |
| 138 | 50 | XX2250 | 402250 | 410 | 380 | 3.7V | 3.8 | 21.7 | 49.7 | 8.0 | 80 |
| 139 | 50 | XX2250 | 472250 | 515 | 480 | 3.7V | 4.5 | 21.7 | 49.7 | 10.0 | 80 |
| 140 | | | 602250 | 595 | 550 | 3.7V | 5.8 | 21.7 | 49.7 | 13.0 | 60 |
| 141 | 51 | XX2332 | 402332 | 280 | 260 | 3.7V | 3.8 | 22.7 | 31.7 | 6.0 | 95 |
| 142 | 52 | XX2333 | 402333 | 280 | 260 | 3.7V | 3.8 | 22.7 | 32.7 | 6.0 | 95 |
| 143 | 53 | XX2339 | 422339 | 320 | 310 | 3.7V | 4.2 | 22.5 | 39.0 | 7.5 | 120 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage | Dimensions (mm) | | | Weight Approx. | Internal Impedance |
|-----|----------|--------------|---------|---------------|---------------|-----------------|------------------|--------------|---------------|----------------|--------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 144 | 54 | XX2343 | 242343 | 195 | 180 | 3.7V | 2.2 | 22.7 | 42.7 | 4.0 | 140 |
| 145 | | | 402343 | 390 | 360 | 3.7V | 3.8 | 22.7 | 42.7 | 7.5 | 80 |
| 146 | 55 | XX2426 | 752426 | 375 | 350 | 3.7V | 7.3 | 23.7 | 25.7 | 7.0 | 80 |
| 147 | 56 | XX2430 | 302430 | 170 | 160 | 3.7V | 2.8 | 23.7 | 29.7 | 3.5 | 140 |
| 148 | | | 402430 | 345 | 230 | 3.7V | 3.8 | 23.7 | 29.7 | 5.0 | 100 |
| 149 | | | 602430 | 410 | 380 | 3.7V | 5.8 | 23.7 | 29.7 | 9.0 | 80 |
| 150 | | | 642430 | 430 | 400 | 3.7V | 6.2 | 23.7 | 29.7 | 9.0 | 80 |
| 151 | 57 | XX2439 | 502439 | 415 | 400 | 3.7V | 5.0 | 24.0 | 39.0 | 8.4 | 70 |
| 152 | | | 602439 | 520 | 500 | 3.7V | 6.0 | 24.0 | 39.0 | 10.2 | 80 |
| 153 | 58 | XX2447 | 372447 | 400 | 380 | 3.7V | 3.6 | 34.0 | 47.2 | 12.0 | 150 |
| 154 | | | 562447 | 580 | 560 | 3.7V | 5.6 | 34.0 | 47.2 | 13.5 | 120 |
| 155 | 59 | XX2459 | 362459 | 560 | 520 | 3.7V | 3.4 | 23.7 | 58.7 | 10.5 | 60 |
| 156 | | | 402459 | 580 | 540 | 3.7V | 3.8 | 23.7 | 58.7 | 11.5 | 60 |
| 157 | 60 | XX2529 | 542529 | 335 | 310 | 3.7V | 5.2 | 24.5 | 28.7 | 7.5 | 100 |
| 158 | 61 | XX2530 | 402530 | 270 | 250 | 3.7V | 3.8 | 24.5 | 29.7 | 6.0 | 120 |
| 159 | | | 502530 | 345 | 320 | 3.7V | 4.8 | 24.5 | 29.7 | 7.0 | 100 |
| 160 | 62 | XX2533 | 602530 | 430 | 400 | 3.7V | 5.8 | 24.5 | 29.7 | 9.0 | 80 |
| 161 | | | 452533 | 310 | 300 | 3.7V | 4.4 | 24.5 | 33.2 | 6.6 | 120 |
| 162 | | | 502533 | 375 | 350 | 3.7V | 5.0 | 25.0 | 33.0 | 7.2 | 100 |
| 163 | | | 302535 | 215 | 200 | 3.7V | 3.0 | 25.0 | 35.0 | 4.5 | 150 |
| 164 | 63 | XX2535 | 502535 | 410 | 380 | 3.7V | 4.8 | 24.5 | 34.7 | 9.0 | 80 |
| 165 | | | 542535 | 430 | 400 | 3.7V | 5.2 | 24.5 | 34.7 | 9.5 | 65 |
| 166 | | | 602535 | 515 | 480 | 3.7V | 5.8 | 24.5 | 34.7 | 10.0 | 60 |
| 167 | 64 | XX2540 | 402540 | 375 | 350 | 3.7V | 3.8 | 24.5 | 39.7 | 8.0 | 80 |
| 168 | | | 432540 | 410 | 380 | 3.7V | 4.1 | 24.5 | 39.7 | 8.0 | 80 |
| 169 | | | 502540 | 485 | 450 | 3.7V | 4.8 | 24.5 | 39.7 | 10.0 | 60 |
| 170 | | | 542540 | 515 | 480 | 3.7V | 5.2 | 24.5 | 39.7 | 11.0 | 60 |
| 171 | | | 602540 | 605 | 560 | 3.7V | 5.8 | 24.5 | 39.7 | 12.0 | 60 |
| 172 | | | 742540 | 755 | 700 | 3.7V | 7.2 | 24.5 | 39.7 | 12.0 | 45 |
| 173 | 65 | XX2545 | 402545 | 430 | 400 | 3.7V | 3.8 | 24.5 | 44.7 | 10.0 | 80 |
| 174 | 66 | XX25100 | 6025100 | 1460 | 1400 | 3.7V | 6.0 | 25.0 | 100.0 | 27.9 | 45 |
| 175 | 67 | XX2730 | 302730 | 175 | 170 | 3.7V | 3.0 | 27.0 | 30.0 | 4.2 | 150 |
| 176 | | | 362730 | 250 | 245 | 3.7V | 3.6 | 27.0 | 30.0 | 5.0 | 80 |
| 177 | | | 382730 | 270 | 260 | 3.7V | 3.8 | 27.0 | 30.0 | 5.4 | 80 |
| 178 | | | 652730 | 450 | 420 | 3.7V | 6.5 | 27.0 | 30.0 | 9.0 | 100 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) | | |
|-----|----------|--------------|--------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|------|----|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | | | |
| 179 | 68 | XX2838 | 582838 | 595 | 550 | 3.7V | 5.8 | 28.0 | 38.0 | 11.0 | 80 | | |
| 180 | 69 | XX2850 | 402850 | 540 | 500 | 3.7V | 3.8 | 27.5 | 49.7 | 11.0 | 60 | | |
| 181 | | | 522850 | 750 | 700 | 3.7V | 5.2 | 28.0 | 50.0 | 14.0 | 70 | | |
| 182 | 70 | XX2931 | 702931 | 580 | 560 | 3.7V | 7.0 | 28.5 | 31.5 | 11.0 | 90 | | |
| 183 | 71 | XX2933 | 402933 | 330 | 320 | 3.7V | 4.0 | 29.0 | 33.0 | 6.9 | 70 | | |
| 184 | 72 | XX2945 | 402945 | 515 | 480 | 3.7V | 3.8 | 28.5 | 44.7 | 10.5 | 60 | | |
| 185 | 72 | XX2945 | 502945 | 670 | 620 | 3.7V | 4.8 | 28.5 | 44.7 | 13.0 | 60 | | |
| 186 | 73 | XX3034 | 403034 | 400 | 370 | 3.7V | 4.0 | 30.0 | 34.0 | 7.7 | 100 | | |
| 187 | 74 | XX3040 | 403040 | 455 | 420 | 3.7V | 3.8 | 29.5 | 39.7 | 9.0 | 80 | | |
| 188 | | | 503040 | 590 | 570 | 3.7V | 5.0 | 30.0 | 40.0 | 11.5 | 50 | | |
| 189 | | | 603040 | 735 | 680 | 3.7V | 5.8 | 29.5 | 39.7 | 6.5 | 42 | | |
| 190 | | | 703040 | 840 | 780 | 3.7V | 6.8 | 29.5 | 39.7 | 15.0 | 45 | | |
| 191 | 75 | XX3042 | 823040 | 1025 | 950 | 3.7V | 8.0 | 29.5 | 39.7 | 20.0 | 45 | | |
| 192 | | | 633042 | 700 | 650 | 3.7V | 6.3 | 30.0 | 42.0 | 14.0 | 80 | | |
| 193 | | | 303048 | 370 | 360 | 3.7V | 3.0 | 30.0 | 48.0 | 8.5 | 60 | | |
| 194 | | | 403048 | 615 | 600 | 3.7V | 4.0 | 30.0 | 48.0 | 12.4 | 60 | | |
| 195 | | | 443048 | 665 | 650 | 3.7V | 4.4 | 30.0 | 48.0 | 12.9 | 60 | | |
| 196 | | | 503048 | 740 | 720 | 3.7V | 5.0 | 30.0 | 48.0 | 14.2 | 50 | | |
| 197 | | | 543048 | 810 | 750 | 3.7V | 5.2 | 29.5 | 47.7 | 17.0 | 50 | | |
| 198 | | | 583048 | 825 | 800 | 3.7V | 5.8 | 30.0 | 48.0 | 15.8 | 50 | | |
| 199 | | | 603048 | 920 | 900 | 3.7V | 6.0 | 30.0 | 48.0 | 17.1 | 50 | | |
| 200 | | | 703048 | 1050 | 1000 | 3.7V | 7.0 | 30.0 | 48.0 | 19.5 | 50 | | |
| 201 | 76 | XX3048 | 763048 | 1100 | 1050 | 3.7V | 7.4 | 29.5 | 47.7 | 28.0 | 40 | | |
| 202 | | | 803048 | 1180 | 1100 | 3.7V | 7.8 | 29.5 | 47.7 | 25.0 | 40 | | |
| 203 | | | 423052 | 690 | 670 | 3.7V | 4.2 | 30.0 | 52.0 | 13.5 | 50 | | |
| 204 | | | 753052 | 1185 | 1100 | 3.7V | 7.3 | 29.5 | 51.7 | 24.0 | 40 | | |
| 205 | | | 78 | XX30150 | 3830150 | 1800 | 1700 | 3.7V | 3.6 | 30.0 | 150.0 | 38.0 | 30 |
| 206 | | | 79 | XX3150 | 393150 | 600 | 580 | 3.7V | 3.9 | 31.0 | 48.0 | 10.4 | 50 |
| 207 | | | | | 423150 | 700 | 680 | 3.7V | 4.2 | 31.0 | 50.0 | 13.6 | 60 |
| 208 | | | | | 503150 | 720 | 700 | 3.7V | 5.0 | 31.0 | 50.0 | 14.2 | 60 |
| 209 | 523150 | 820 | | | 800 | 3.7V | 5.2 | 31.0 | 50.0 | 15.9 | 50 | | |
| 210 | 633150 | 950 | | | 900 | 3.7V | 6.3 | 31.0 | 50.0 | 17.2 | 50 | | |
| 211 | 703150 | 1150 | | | 1100 | 3.7V | 7.0 | 31.0 | 50.0 | 19.4 | 50 | | |
| 212 | 753150 | 1250 | 1200 | 3.7V | 7.5 | 31.0 | 50.0 | 23.0 | 60 | | | | |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|---------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 213 | 80 | XX3173 | 473173 | 1240 | 1150 | 3.7V | 4.5 | 30.5 | 72.7 | 24.0 | 30 |
| 214 | | | 503173 | 1240 | 1150 | 3.7V | 4.8 | 30.5 | 72.7 | 26.0 | 30 |
| 215 | | | 543173 | 1295 | 1200 | 3.7V | 5.2 | 30.5 | 72.7 | 28.0 | 30 |
| 216 | | | 573173 | 1405 | 1300 | 3.7V | 5.5 | 30.5 | 72.7 | 28.0 | 30 |
| 217 | 81 | XX3245 | 303245 | 390 | 360 | 3.7V | 2.8 | 31.5 | 44.7 | 9.0 | 100 |
| 218 | | | 363245 | 485 | 450 | 3.7V | 3.4 | 31.5 | 44.7 | 10.0 | 60 |
| 219 | | | 633245 | 950 | 880 | 3.7V | 6.1 | 31.5 | 44.7 | 18.0 | 45 |
| 220 | | | 703245 | 1055 | 980 | 3.7V | 6.8 | 31.5 | 44.7 | 21.0 | 40 |
| 221 | 82 | XX3436 | 503436 | 615 | 600 | 3.7V | 5.0 | 34.0 | 36.0 | 10.6 | 60 |
| 222 | | | 603436 | 650 | 630 | 3.7V | 6.0 | 34.0 | 36.0 | 12.8 | 60 |
| 223 | 83 | XX3438 | 473438 | 520 | 500 | 3.7V | 4.7 | 34.0 | 38.0 | 10.6 | 60 |
| 224 | 84 | XX3440 | 473440 | 645 | 600 | 3.7V | 4.7 | 33.5 | 39.7 | 13.5 | 60 |
| 225 | | | 503440 | 700 | 650 | 3.7V | 4.8 | 33.5 | 39.7 | 14.0 | 50 |
| 226 | | | 703440 | 1000 | 950 | 3.7V | 6.8 | 33.5 | 39.7 | 20 | 40 |
| 227 | | | 803440 | 1080 | 1000 | 3.7V | 7.8 | 33.5 | 39.7 | 25.0 | 40 |
| 228 | 85 | XX3442 | 403442 | 565 | 550 | 3.7V | 4.0 | 34.0 | 42.0 | 11.2 | 60 |
| 229 | | | 443442 | 670 | 650 | 3.7V | 4.4 | 34.0 | 42.0 | 12.8 | 60 |
| 230 | | | 553442 | 740 | 720 | 3.7V | 5.5 | 34.0 | 42.0 | 15.9 | 60 |
| 231 | 85 | XX3442 | 613442 | 825 | 800 | 3.7V | 6.1 | 34.0 | 42.0 | 17.7 | 50 |
| 232 | 86 | XX3445 | 443445 | 710 | 660 | 3.7V | 4.2 | 33.5 | 44.7 | 12.0 | 40 |
| 233 | | | 803445 | 1400 | 1300 | 3.7V | 7.8 | 33.5 | 44.7 | 28.0 | 30 |
| 234 | | | 303448 | 415 | 400 | 3.7V | 3.0 | 34.0 | 48.0 | 9.7 | 65 |
| 235 | 87 | XX3448 | 383448 | 615 | 600 | 3.7V | 3.8 | 34.0 | 48.0 | 12.3 | 60 |
| 236 | | | 403448 | 650 | 630 | 3.7V | 4.0 | 34.0 | 48.0 | 12.8 | 60 |
| 237 | | | 443448 | 715 | 700 | 3.7V | 4.4 | 34.0 | 48.0 | 12.6 | 60 |
| 238 | | | 503448 | 820 | 760 | 3.7V | 5.0 | 34.0 | 48.0 | 15.5 | 60 |
| 239 | | | 523448 | 840 | 780 | 3.7V | 5.0 | 33.5 | 47.7 | 17.0 | 50 |
| 240 | | | 603448 | 970 | 950 | 3.7V | 6.0 | 34.0 | 48.0 | 18.9 | 50 |
| 241 | | | 743448 | 1295 | 1200 | 3.7V | 7.2 | 33.5 | 47.7 | 25.0 | 40 |
| 242 | | | 783448 | 1340 | 1300 | 3.7V | 7.8 | 34.0 | 48.0 | 24.5 | 50 |
| 243 | | | 803448 | 1400 | 1300 | 3.7V | 7.8 | 33.5 | 47.7 | 28.0 | 40 |
| 244 | | | 903448 | 1600 | 1500 | 3.7V | 8.8 | 33.5 | 47.7 | 30.0 | 40 |
| 245 | 88 | XX3450 | 323450 | 515 | 500 | 3.7V | 3.2 | 34.0 | 50.0 | 10.7 | 60 |
| 246 | | | 363450 | 600 | 580 | 3.7V | 3.6 | 34.0 | 50.0 | 12.0 | 65 |
| 247 | | | 383450 | 670 | 650 | 3.7V | 3.8 | 34.0 | 50.0 | 12.0 | 50 |
| 248 | | | 383450H | 720 | 700 | 3.7V | 3.8 | 34 | 50 | 12 | 50 |
| 249 | | | 433450 | 770 | 750 | 3.7V | 4.3 | 34.0 | 50.0 | 15.3 | 60 |
| 250 | | | 473450 | 850 | 830 | 3.7V | 4.7 | 34.0 | 50.0 | 16.3 | 65 |
| 251 | | | 503450 | 850 | 830 | 3.7V | 5.0 | 34.0 | 50.0 | 16.7 | 65 |
| 252 | | | 523450 | 925 | 900 | 3.7V | 5.2 | 34.0 | 50.0 | 17.7 | 65 |
| 253 | | | 603450 | 1030 | 1000 | 3.7V | 6.0 | 34.0 | 50.0 | 19.5 | 45 |
| 254 | | | 653450 | 1110 | 1080 | 3.7V | 6.5 | 34.0 | 50.0 | 20.0 | 50 |
| 255 | 753450 | 1350 | 1300 | 3.7V | 7.5 | 34.0 | 50.0 | 24.0 | 50 | | |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|---------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 256 | | | 293455 | 520 | 500 | 3.7V | 2.9 | 34.0 | 55.0 | 11.0 | 65 |
| 257 | | | 393455 | 720 | 700 | 3.7V | 3.9 | 34.0 | 55.0 | 14.7 | 50 |
| 258 | 89 | XX3455 | 423455 | 800 | 780 | 3.7V | 4.2 | 34.0 | 55.0 | 15.2 | 50 |
| 259 | | | 523455 | 1080 | 1050 | 3.7V | 5.2 | 34.0 | 55.0 | 19.6 | 50 |
| 260 | | | 623455 | 1300 | 1250 | 3.7V | 6.2 | 34.0 | 55.0 | 24.3 | 45 |
| 261 | | | 333456 | 615 | 570 | 3.7V | 3.1 | 33.5 | 55.7 | 11.0 | 60 |
| 262 | 90 | XX3456 | 403456 | 755 | 700 | 3.7V | 3.8 | 33.5 | 55.7 | 13.0 | 45 |
| 263 | | | 803456 | 1700 | 1600 | 3.7V | 7.8 | 33.5 | 55.7 | 32.0 | 30 |
| 264 | | | 383458 | 780 | 750 | 3.7V | 3.8 | 34.0 | 58.0 | 14.8 | 50 |
| 265 | 91 | XX3458 | 483458 | 1070 | 1000 | 3.7V | 4.8 | 34.0 | 58.0 | 19.3 | 60 |
| 266 | | | 523458 | 1090 | 1050 | 3.7V | 5.2 | 34.0 | 58.0 | 21.6 | 45 |
| 267 | 92 | XX3460 | 603460 | 1240 | 1200 | 3.7V | 6.0 | 34.0 | 60.0 | 24.5 | 50 |
| 268 | | | 503465 | 1185 | 1100 | 3.7V | 4.8 | 33.5 | 64.7 | 24.0 | 40 |
| 269 | 93 | XX3465 | 603465 | 1510 | 1400 | 3.7V | 5.8 | 33.5 | 64.7 | 28.0 | 40 |
| 270 | 94 | XX3565 | 643565 | 1550 | 1450 | 3.7V | 6.2 | 33.5 | 64.7 | 32.0 | 40 |
| 271 | 95 | XX3466 | 403466 | 1020 | 950 | 3.7V | 4.0 | 34.0 | 66.0 | 20.0 | 60 |
| 272 | | | 403475 | 1080 | 1000 | 3.7V | 3.8 | 33.5 | 74.7 | 22.0 | 40 |
| 273 | 96 | XX3475 | 723475 | 1920 | 1800 | 3.7V | 7.0 | 33.5 | 74.7 | 38.0 | 30 |
| 274 | | | 603480 | 1580 | 1550 | 3.7V | 6.0 | 34.0 | 80.0 | 28.4 | 50 |
| 275 | 97 | XX3480 | 653480 | 1650 | 1600 | 3.7V | 6.5 | 34.0 | 80.0 | 31.5 | 50 |
| 276 | 98 | XX34145 | 5034145 | 2600 | 2500 | 3.7V | 4.8 | 34.0 | 145.0 | 48.0 | 30 |
| 277 | 99 | XX3535 | 213535 | 205 | 190 | 3.7V | 1.9 | 34.5 | 34.7 | 4.0 | 140 |
| 278 | | | 383562 | 880 | 850 | 3.7V | 3.8 | 35.0 | 62.0 | 16.5 | 50 |
| 279 | | | 403562 | 915 | 860 | 3.7V | 3.8 | 34.5 | 61.7 | 18.0 | 45 |
| 280 | 100 | XX3562 | 423562 | 970 | 950 | 3.7V | 4.2 | 35.0 | 62.0 | 17.8 | 35 |
| 281 | | | 483562 | 1135 | 1050 | 3.7V | 4.8 | 35.0 | 62.0 | 22.0 | 60 |
| 282 | | | 503562 | 1240 | 1200 | 3.7V | 5.0 | 35.0 | 62.0 | 22.5 | 50 |
| 283 | | | 803562 | 1860 | 1750 | 3.7V | 7.8 | 34.5 | 61.7 | 37.0 | 30 |
| 284 | | | 503566 | 1240 | 1200 | 3.7V | 5.0 | 35.0 | 66.0 | 24.4 | 50 |
| 285 | 101 | XX3566 | 553566 | 1350 | 1300 | 3.7V | 5.5 | 35.0 | 66.0 | 25.5 | 50 |
| 286 | | | 583566 | 1450 | 1400 | 3.7V | 5.8 | 35.0 | 66.0 | 26.7 | 50 |
| 287 | | | 853566 | 1960 | 1900 | 3.7V | 8.5 | 35.0 | 66.0 | 36.7 | 50 |
| 288 | 102 | XX35130 | 5535130 | 2800 | 2600 | 3.7V | 5.3 | 34.5 | 129.7 | 54.0 | 25 |
| 289 | | | 6535130 | 3400 | 3200 | 3.7V | 6.3 | 34.5 | 129.7 | 65.0 | 25 |
| 290 | 103 | XX35138 | 2735138 | 1290 | 1200 | 3.7V | 2.5 | 34.5 | 137.7 | 28.0 | 30 |
| 291 | | | 6835138 | 3800 | 3600 | 3.7V | 6.6 | 34.5 | 137.7 | 80.0 | 25 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage | Dimensions (mm) | | | Weight Approx. | Internal Impedance |
|-----|----------|--------------|---------|---------------|---------------|-----------------|------------------|--------------|---------------|----------------|--------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 292 | | | 753650 | 1280 | 1250 | 3.7V | 7.5 | 36.0 | 50.0 | 22.8 | 50 |
| 293 | 104 | XX3650 | 853650 | 1440 | 1400 | 3.7V | 8.5 | 36.0 | 50.0 | 26.8 | 50 |
| 294 | | | 883650 | 1700 | 1650 | 3.7V | 8.8 | 36.0 | 50.0 | 30.2 | 50 |
| 295 | 105 | XX3658 | 753658 | 1650 | 1600 | 3.7V | 7.5 | 36.0 | 58.0 | 17.4 | 100 |
| 296 | 106 | XX36110 | 5536110 | 2470 | 2400 | 3.7V | 5.5 | 36.0 | 110.0 | 44.9 | 35 |
| 297 | | | 373759 | 870 | 850 | 3.7V | 3.7 | 37.0 | 59.0 | 16.8 | 50 |
| 298 | 107 | XX3759 | 503759 | 1150 | 1100 | 3.7V | 5.0 | 37.0 | 59.0 | 19.0 | 40 |
| 299 | | | 563759 | 1350 | 1300 | 3.7V | 5.6 | 37.0 | 59.0 | 24.7 | 50 |
| 300 | | | 583759 | 1390 | 1350 | 3.7V | 5.8 | 37.0 | 59.0 | 24.7 | 50 |
| 301 | 108 | XX3840 | 463840 | 680 | 650 | 3.7V | 4.6 | 38.0 | 40.0 | 12.9 | 50 |
| 302 | 109 | XX3853 | 503853 | 1080 | 1000 | 3.7V | 4.8 | 3.8 | 52.7 | 21.0 | 40 |
| 303 | 110 | XX3864 | 703864 | 1920 | 1800 | 3.7V | 6.8 | 37.5 | 63.7 | 38.0 | 25 |
| 304 | | | 773864 | 2160 | 2000 | 3.7V | 7.5 | 37.5 | 63.7 | 40.0 | 25 |
| 305 | 111 | XX3875 | 383875 | 1050 | 1000 | 3.7V | 3.8 | 38.0 | 75.0 | 22.3 | 40 |
| 306 | | | 4238114 | 2050 | 2000 | 3.7V | 4.2 | 38.0 | 114.0 | 41.5 | 35 |
| 307 | 112 | XX38114 | 6038114 | 2570 | 2500 | 3.7V | 6.0 | 38.0 | 114.0 | 55.0 | 50 |
| 308 | | | 8038114 | 3550 | 3500 | 3.7V | 8.0 | 37.5 | 113.5 | 64.0 | 50 |
| 309 | 113 | XX3944 | 343944 | 550 | 530 | 3.7V | 3.4 | 39.0 | 44.0 | 11.5 | 60 |
| 310 | | | 383944 | 650 | 620 | 3.7V | 3.8 | 39.0 | 44.0 | 11.2 | 50 |
| 311 | 114 | XX4085 | 504085 | 1910 | 1800 | 3.7V | 4.8 | 39.5 | 84.7 | 32.0 | 25 |
| 312 | 115 | XX4167 | 384167 | 1180 | 1100 | 3.7V | 3.6 | 40.5 | 66.7 | 24.0 | 40 |
| 313 | | | 304169 | 830 | 800 | 3.7V | 3.0 | 41.0 | 69.0 | 16.0 | 50 |
| 314 | | | 384169 | 1150 | 1100 | 3.7V | 3.8 | 41.0 | 69.0 | 23.5 | 50 |
| 315 | 116 | XX4169 | 454169 | 1480 | 1450 | 3.7V | 4.5 | 41.0 | 69.0 | 27.5 | 45 |
| 316 | | | 554169 | 1550 | 1500 | 3.7V | 5.5 | 41.0 | 69.0 | 30.0 | 45 |
| 317 | | | 634169 | 2050 | 2000 | 3.7V | 6.3 | 41.0 | 69.0 | 37.2 | 40 |
| 318 | 117 | XX4270 | 704270 | 2350 | 2200 | 3.7V | 6.8 | 41.5 | 69.7 | 43.0 | 15 |
| 319 | | | 554296 | 2160 | 2100 | 3.7V | 5.5 | 42.0 | 96.0 | 43.4 | 40 |
| 320 | 118 | XX4296 | 604296 | 2850 | 2800 | 3.7V | 6.0 | 42.0 | 96.0 | 27.8 | 50 |
| 321 | | | 654296 | 3000 | 2900 | 3.7V | 6.5 | 42.0 | 96.0 | 53.2 | 60 |
| 322 | 119 | XX42100 | 6042100 | 2950 | 2900 | 3.7V | 6.0 | 42.0 | 100.0 | 53.8 | 35 |
| 323 | 120 | XX4350 | 304350 | 620 | 600 | 3.7V | 3.0 | 43.0 | 49.0 | 12.8 | 55 |
| 324 | 121 | XX4365 | 804365 | 2460 | 2400 | 3.7V | 7.9 | 43.0 | 65.0 | 45.0 | 35 |
| 325 | 122 | XX4374 | 304374 | 990 | 920 | 3.7V | 2.8 | 42.5 | 73.7 | 19.0 | 45 |
| 326 | | | 704374 | 2560 | 2400 | 3.7V | 6.8 | 42.5 | 73.7 | 44.0 | 20 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|---------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 327 | 123 | XX4087 | 444087 | 1550 | 1450 | 3.7V | 4.4 | 40.0 | 87.0 | 30.0 | 45 |
| 328 | 124 | XX43135 | 4543135 | 3050 | 3000 | 3.7V | 4.5 | 43.5 | 133.5 | 58.0 | 45 |
| 329 | 125 | XX4453 | 434453 | 1000 | 950 | 3.7V | 4.1 | 44.0 | 53.0 | 20.0 | 50 |
| 330 | | | 474490 | 1940 | 1800 | 3.7V | 4.5 | 43.5 | 89.7 | 36.0 | 25 |
| 331 | 126 | XX4490 | 504490 | 2160 | 2000 | 3.7V | 4.8 | 43.5 | 89.7 | 39.0 | 25 |
| 332 | | | 544490 | 2350 | 2200 | 3.7V | 5.2 | 43.5 | 89.7 | 43.0 | 25 |
| 333 | 127 | XX4555 | 744555 | 2050 | 1900 | 3.7V | 7.2 | 44.5 | 54.7 | 40.0 | 25 |
| 334 | | | 4045135 | 3090 | 3000 | 3.7V | 4.0 | 45.0 | 135.0 | 57.2 | 40 |
| 335 | | | 4545135 | 3100 | 3000 | 3.7V | 4.5 | 45.0 | 135.0 | 61.4 | 40 |
| 336 | | | 5045135 | 3700 | 3600 | 3.7V | 5.0 | 45.0 | 135.0 | 65.0 | 50 |
| 337 | 128 | XX45135 | 5545135 | 4020 | 3900 | 3.7V | 5.5 | 45.0 | 135.0 | 65.2 | 50 |
| 338 | | | 6045135 | 4150 | 4000 | 3.7V | 6.0 | 45.0 | 135.0 | 80.0 | 40 |
| 339 | | | 6345135 | 4650 | 4500 | 3.7V | 6.3 | 45.0 | 135.0 | 80.0 | 30 |
| 340 | | | 5446125 | 3650 | 3500 | 3.7V | 5.2 | 45.5 | 124.7 | 75.0 | 25 |
| 341 | 129 | XX46125 | 6046125 | 3650 | 3520 | 3.7V | 5.8 | 45.5 | 124.7 | 75.0 | 25 |
| 342 | 130 | XX4792 | 504792 | 2450 | 2300 | 3.7V | 4.8 | 46.5 | 91.7 | 47.0 | 20 |
| 343 | | | 5047125 | 3350 | 3200 | 3.7V | 4.8 | 46.5 | 134.7 | 60.0 | 20 |
| 344 | 131 | XX47125 | 6047125 | 3650 | 3500 | 3.7V | 5.8 | 46.5 | 124.7 | 75.0 | 20 |
| 345 | | | 4048135 | 3000 | 2900 | 3.7V | 4.0 | 48.0 | 135.0 | 55.0 | 50 |
| 346 | 132 | XX48135 | 4848135 | 3630 | 3550 | 3.7V | 4.8 | 48.0 | 135.0 | 66.2 | 40 |
| 347 | | | 5048135 | 3650 | 3600 | 3.7V | 5.0 | 48.0 | 133.5 | 59.0 | 45 |
| 348 | | | 374977 | 1350 | 1300 | 3.7V | 3.7 | 49.0 | 77.0 | 27.0 | 45 |
| 349 | | | 404977 | 1470 | 1430 | 3.7V | 4.0 | 49.0 | 77.0 | 29.4 | 40 |
| 350 | 133 | XX4977 | 454977 | 1750 | 1700 | 3.7V | 4.5 | 49.0 | 77.0 | 33.5 | 50 |
| 351 | | | 504977 | 2100 | 2000 | 3.7V | 5.0 | 49.0 | 77.0 | 33.5 | 50 |
| 352 | | | 305060 | 840 | 780 | 3.7V | 2.8 | 49.5 | 59.7 | 17.5 | 60 |
| 353 | | | 435060 | 1400 | 1300 | 3.7V | 4.1 | 49.5 | 59.7 | 28.0 | 40 |
| 354 | 134 | XX5060 | 605060 | 1920 | 1800 | 3.7V | 5.8 | 49.5 | 59.7 | 38.0 | 25 |
| 355 | | | 675060 | 2160 | 2000 | 3.7V | 6.5 | 49.5 | 59.7 | 41.0 | 25 |
| 356 | | | 725060 | 2370 | 2200 | 3.7V | 7.0 | 49.5 | 59.7 | 42.0 | 25 |
| 357 | | | 755060 | 2400 | 2250 | 3.7V | 7.3 | 49.5 | 59.7 | 45.0 | 20 |
| 358 | | | 325085 | 1450 | 1400 | 3.7V | 3.2 | 50 | 85 | 26 | 45 |
| 359 | | | 365085 | 1620 | 1500 | 3.7V | 3.4 | 49.5 | 84.7 | 32.0 | 30 |
| 360 | | | 385085 | 1730 | 1700 | 3.7V | 3.8 | 50.0 | 85.0 | 32.5 | 50 |
| 361 | | | 425085 | 1960 | 1900 | 3.7V | 4.2 | 50.0 | 85.0 | 36.2 | 50 |
| 362 | | | 455085 | 2060 | 2000 | 3.7V | 4.5 | 50.0 | 85.0 | 41.9 | 50 |
| 363 | 135 | XX5085 | 475085 | 2150 | 2050 | 3.7V | 4.5 | 49.5 | 84.7 | 40.0 | 25 |
| 364 | | | 505085 | 2350 | 2200 | 3.7V | 4.8 | 49.5 | 84.7 | 43.0 | 25 |
| 365 | | | 605085 | 2550 | 2500 | 3.7V | 6.0 | 50.0 | 85.0 | 47.6 | 50 |
| 366 | | | 655085 | 3100 | 3000 | 3.7V | 6.5 | 50.0 | 85.0 | 55.9 | 35 |
| 367 | | | 855085 | 4230 | 4100 | 3.7V | 8.5 | 50.0 | 85.0 | 74.0 | 50 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage | Dimensions (mm) | | | Weight Approx. | Internal Impedance |
|-----|----------|--------------|---------|---------------|---------------|-----------------|------------------|--------------|---------------|----------------|--------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 368 | 136 | XX50110 | 5050110 | 3080 | 3000 | 3.7V | 5.0 | 50.0 | 110.0 | 58.2 | 35 |
| 369 | 137 | XX50140 | 6050140 | 4700 | 4500 | 3.7V | 5.8 | 49.5 | 139.7 | 98.0 | 20 |
| 370 | 138 | XX50150 | 6050150 | 5200 | 5000 | 3.7V | 5.8 | 49.5 | 149.7 | 102.0 | 25 |
| 371 | | | 385165 | 1335 | 1300 | 3.7V | 3.8 | 51.0 | 65.0 | 26.2 | 50 |
| 372 | 139 | XX5165 | 505165 | 1800 | 1750 | 3.7V | 5.0 | 50.5 | 65.0 | 34.2 | 5 |
| 373 | | | 555165 | 2050 | 2000 | 3.7V | 5.5 | 51.0 | 65.0 | 38.2 | 45 |
| 374 | 140 | XX5183 | 505183 | 2500 | 2400 | 3.7V | 5.0 | 51.0 | 83.0 | 51.0 | 35 |
| 375 | 141 | XX5251 | 365251 | 990 | 920 | 3.7V | 3.4 | 51.5 | 50.7 | 21.0 | 45 |
| 376 | 142 | XX5255 | 905255 | 2590 | 2400 | 3.7V | 8.8 | 51.5 | 54.7 | 50.5 | 25 |
| 377 | | | 405280 | 1960 | 1900 | 3.7V | 4.0 | 52.0 | 78.0 | 36.9 | 40 |
| 378 | 143 | XX5280 | 455280 | 2190 | 2150 | 3.7V | 4.5 | 52.0 | 78.0 | 39.6 | 50 |
| 379 | | | 385371 | 1600 | 1500 | 3.7V | 3.6 | 52.5 | 70.7 | 32.0 | 25 |
| 380 | 144 | XX5371 | 745371 | 3200 | 3000 | 3.7V | 7.2 | 52.5 | 70.7 | 62.0 | 20 |
| 381 | | | 455460 | 1550 | 1500 | 3.7V | 4.5 | 54.0 | 60.0 | 29.2 | 50 |
| 382 | 145 | XX5460 | 565460 | 1850 | 1800 | 3.7V | 5.6 | 54.0 | 60.0 | 34.0 | 50 |
| 383 | | | 585460 | 2050 | 2000 | 3.7V | 5.8 | 54.0 | 60.0 | 37.0 | 50 |
| 384 | | | 335585 | 1620 | 1500 | 3.7V | 3.1 | 54.5 | 84.7 | 35.0 | 21 |
| 385 | | | 355585 | 1820 | 1700 | 3.7V | 3.3 | 54.5 | 84.7 | 35.0 | 30 |
| 386 | 146 | XX5585 | 445585 | 2160 | 2000 | 3.7V | 4.2 | 54.5 | 84.7 | 41.0 | 25 |
| 387 | | | 475585 | 2460 | 2300 | 3.7V | 4.5 | 54.5 | 84.7 | 42.0 | 25 |
| 388 | | | 545585 | 2850 | 2700 | 3.7V | 5.2 | 54.5 | 84.7 | 56.0 | 30 |
| 389 | | | 655585 | 3400 | 3200 | 3.7V | 6.3 | 54.5 | 84.7 | 66.0 | 25 |
| 390 | 147 | XX5590 | 385590 | 2450 | 2000 | 3.7V | 3.6 | 54.5 | 89.7 | 43.0 | 30 |
| 391 | 148 | XX5597 | 355597 | 1950 | 1900 | 3.7V | 3.3 | 55.0 | 97.0 | 39.0 | 45 |
| 392 | | | 3857100 | 2550 | 2400 | 3.7V | 3.6 | 56.5 | 99.7 | 45.0 | 25 |
| 393 | 149 | XX57100 | 5057100 | 3150 | 3000 | 3.7V | 4.8 | 56.5 | 99.7 | 60.0 | 20 |
| 394 | 150 | XX58113 | 6558113 | 4850 | 4700 | 3.7V | 6.3 | 57.5 | 112.7 | 95.0 | 15 |
| 395 | | | 365975 | 1720 | 1600 | 3.7V | 3.4 | 58.5 | 74.7 | 33.0 | 25 |
| 396 | 151 | XX5975 | 645975 | 3150 | 3000 | 3.7V | 6.2 | 58.5 | 74.7 | 60.0 | 20 |
| 397 | | | 6459156 | 6700 | 6500 | 3.7V | 6.2 | 58.5 | 155.7 | 140.0 | 20 |
| 398 | 152 | XX59156 | 8059156 | 8200 | 8000 | 3.7V | 7.8 | 58.5 | 155.7 | 170.0 | 8 |
| 399 | | | 506066 | 2050 | 2000 | 3.7V | 5.0 | 60.0 | 66.0 | 38.0 | 45 |
| 400 | 153 | XX6066 | 606066 | 2470 | 2400 | 3.7V | 6.0 | 60.0 | 66.0 | 46.0 | 40 |
| 401 | 154 | XX6095 | 406095 | 2350 | 2200 | 3.7V | 3.8 | 59.5 | 94.7 | 45.0 | 20 |
| 402 | 155 | XX6186 | 536186 | 3150 | 3000 | 3.7V | 5.1 | 60.5 | 85.7 | 65.0 | 16 |

MATRIX ELECTRÓNICA

| No. | Mode No. | Battery mode | Model | Capacity | | Nominal Voltage (V) | Dimensions (mm) | | | Weight Approx. (g) | Internal Impedance (mΩ) |
|-----|----------|--------------|---------|---------------|---------------|---------------------|------------------|--------------|---------------|--------------------|-------------------------|
| | | | | Typical (mAh) | Nominal (mAh) | | Thickness (±0.2) | Width (±0.8) | Height (±0.8) | | |
| 403 | 156 | XX6294 | 506294 | 3100 | 3000 | 3.7V | 5.0 | 62.0 | 93.0 | 52.8 | 40 |
| 404 | 157 | XX6373 | 456373 | 2300 | 2250 | 3.7V | 4.5 | 62.0 | 72.5 | 42.7 | 45 |
| 405 | 158 | XX6469 | 746469 | 3650 | 3500 | 3.7V | 7.2 | 63.5 | 68.7 | 70.0 | 20 |
| 406 | 159 | XX6475 | 456475 | 2450 | 2400 | 3.7V | 4.5 | 63.5 | 75.5 | 47.0 | 50 |
| 407 | 160 | XX6479 | 496479 | 2750 | 2700 | 3.7V | 4.7 | 63.5 | 78.5 | 52.0 | 45 |
| 408 | | | 306483 | 1750 | 1700 | 3.7V | 3.0 | 64.0 | 83.0 | 34.0 | 50 |
| 409 | 161 | XX6483 | 386483 | 2060 | 2000 | 3.7V | 3.8 | 64.0 | 83.0 | 39.4 | 40 |
| 410 | | | 706483 | 4350 | 4200 | 3.7V | 7.0 | 64.0 | 83.0 | 76.6 | 50 |
| 411 | 162 | XX6570 | 606570 | 3150 | 3000 | 3.7V | 5.8 | 64.5 | 69.7 | 60.0 | 20 |
| 412 | 163 | XX6580 | 456580 | 2770 | 2700 | 3.7V | 4.5 | 65.0 | 80.0 | 51.6 | 40 |
| 413 | 164 | XX67100 | 3667100 | 2650 | 2500 | 3.7V | 3.4 | 66.5 | 99.7 | 50.0 | 20 |
| 414 | | | 4067100 | 2950 | 2800 | 3.7V | 3.8 | 66.5 | 99.7 | 56.0 | 20 |
| 415 | | | 4567100 | 3400 | 3300 | 3.7V | 4.5 | 67.0 | 100.0 | 61.5 | 40 |
| 416 | 164 | XX67100 | 5567100 | 4120 | 4000 | 3.7V | 5.5 | 67.0 | 100.0 | 76.1 | 50 |
| 417 | | | 6567100 | 4650 | 4500 | 3.7V | 6.3 | 66.5 | 99.7 | 90.0 | 20 |
| 418 | | | 6767100 | 5150 | 5000 | 3.7V | 6.5 | 66.5 | 99.7 | 100.0 | 20 |
| 419 | 165 | XX67103 | 3567103 | 2550 | 2500 | 3.7V | 3.3 | 67.0 | 102.5 | 51.5 | 45 |
| 420 | 166 | XX67140 | 7467140 | 8200 | 8000 | 3.7V | 7.2 | 66.5 | 139.7 | 170.0 | 15 |
| 421 | 170 | XX8561 | 408561 | 2220 | 2100 | 3.7V | 3.8 | 84.5 | 60.7 | 44.0 | 25 |
| 422 | 171 | XX88120 | 5588120 | 6650 | 6500 | 3.7V | 5.3 | 87.5 | 119.7 | 140.0 | 15 |