

**LITHIUM CELLS OR BATTERIES TEST SUMMARY AND CERTIFICATION  
IN ACCORDANCE WITH SUB-SECTION 38.3  
OF MANUAL OF TESTS AND CRITERIA**

**BATTERY TRANSPORTATION INFORMATION**

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| Name of cell, battery or product manufacture, as applicable:<br><br>Item Name <b>Model name : CR2050HR X</b><br><br>Normal voltage <b>3V</b><br>Rated capacity <b>350mAh</b><br><br>Item Description <b>Lithium metal cell / battery</b> | Cell, battery or product manufacturer's contact information to include address, phone number, email address and website for more information:<br><br>Maxell, Ltd.<br>5 Takumidai, Ono-Shi, Hyogo, 675-1322 Japan<br>Phone: (+81) 794-63-8054<br>e-mail: md_tech_support@maxell.co.jp<br>Web: https://www.maxell.co.jp |
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| Name of the test laboratory to include address, phone number, email address and website for more information<br><br>Maxell, Ltd.<br>1 Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun, Kyoto, 618-8525 Japan<br>Phone: (+81) 75-956-4148<br>e-mail: md_tech_support@maxell.co.jp<br>Web: https://www.maxell.co.jp | Test report identification number:<br>C-1910-12 | Date of the test report:<br>October 15, 2019 |
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| Description of cell or battery to include at a minimum: Lithium ion or Lithium metal cell or battery Mass; Watt-hour rating, or Lithium content, Physical description of the cell/battery; and Model Number<br><br>Cell / battery Type : <b>Lithium metal</b><br><br>Cell or Battery : <b>Cell</b><br><br>Lithium content : <b>0.1g</b><br><br>Cell or Battery Weight : <b>4.1g</b><br><br>Physical description : <b>Coin type</b> | List of test conducted and results(i.e. Pass/Fail) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">Test number</th> <th style="width: 45%;">Designation</th> <th style="width: 40%;">Results</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">T-1</td> <td style="text-align: center;">Altitude Simulation</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-2</td> <td style="text-align: center;">Thermal Test</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-3</td> <td style="text-align: center;">Vibration</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-4</td> <td style="text-align: center;">Shock</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-5</td> <td style="text-align: center;">External short circuit</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-6</td> <td style="text-align: center;">Impact / Crush</td> <td style="text-align: center;">Pass</td> </tr> <tr> <td style="text-align: center;">T-7</td> <td style="text-align: center;">Overcharge *</td> <td style="text-align: center;">Not applicable</td> </tr> <tr> <td style="text-align: center;">T-8</td> <td style="text-align: center;">Forced Discharge</td> <td style="text-align: center;">Pass</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 5px;">* Only secondary battery with protection element</p> | Test number    | Designation | Results | T-1 | Altitude Simulation | Pass | T-2 | Thermal Test | Pass | T-3 | Vibration | Pass | T-4 | Shock | Pass | T-5 | External short circuit | Pass | T-6 | Impact / Crush | Pass | T-7 | Overcharge * | Not applicable | T-8 | Forced Discharge | Pass |
|--|--|----------------|-------------|---------|-----|---------------------|------|-----|--------------|------|-----|-----------|------|-----|-------|------|-----|------------------------|------|-----|----------------|------|-----|--------------|----------------|-----|------------------|------|
| Test number  | Designation  | Results        |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-1  | Altitude Simulation  | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-2  | Thermal Test   | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-3  | Vibration  | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-4  | Shock  | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-5  | External short circuit   | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-6  | Impact / Crush   | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-7  | Overcharge *   | Not applicable |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |
| T-8  | Forced Discharge   | Pass           |             |         |     |                     |      |     |              |      |     |           |      |     |       |      |     |                        |      |     |                |      |     |              |                |     |                  |      |

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| Reference to assembled battery testing requirements, if applicable(i.e. 38.3.3 (f) and 38.3.3 (g))<br><br>Not applicable | Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any:<br><br>Revision 6, Amendment 1 | For air transport only: Does the cell or battery comply with the 30% State of Charge?<br><br>Not applicable |
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**PRODUCT CLASSIFICATION FOR TRANSPORT(According to UN-DGP)**

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| UN Classification,<br><br><b>UN3090</b> | Proper Shipping Name:<br><br><b>Lithium Metal Batteries</b> |
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| Signature with name and title of signatory as an indication of the validity information provided.<br><br>Hiroyuki Suzuki / Senior Manager, Design Department<br>Signature<br><br>Phone: (+81) 794-63-8054<br>e-mail: md_tech_support@maxell.co.jp | This document remains valid as long as no changes, modifications or additions are made to the model(s) described in this document, after being transported from a Manufacturer MAXELL, LTD. The model(s) has(have) been classified according to the applicable transport regulations and the UN Manual of Tests and Criteria as of the date of the certification. The model(s) must be packaged, labeled and documented according to country and other international regulations for transportation. |
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| Date document was generated<br>December 1, 2022 |  |
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