1. General description

LXMSANAA19-181 is a UHF band RFID Tag having an antenna.

[Features]
- Small and slim package design
- UHF band (902-928MHz)
- ISO18000-63 / EPC Global Gen2v2 Compliant
- Size is 40.0 x 6.0 x 0.9mm
- Using Impinj MonzaR6
- Reading range: 2m  *Reference
- RoHS compliant

2. Block Diagram
3. Mechanical Information

[Dimension]

<table>
<thead>
<tr>
<th>Mark</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>40.0±0.2</td>
</tr>
<tr>
<td>W</td>
<td>6.0±0.2</td>
</tr>
<tr>
<td>T</td>
<td>0.9 max</td>
</tr>
<tr>
<td>T1</td>
<td>0.4 max</td>
</tr>
<tr>
<td>T2</td>
<td>0.5 max</td>
</tr>
</tbody>
</table>

unit : mm
4. Electrical performance

4-1. Frequency range
902-928 MHz

4-2. IC / Memory size

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>Impinj Monza R6</td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td>ISO/IEC 18000-63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EPC global Gen2 V2</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>EPC</td>
<td>Max 96 bit</td>
</tr>
<tr>
<td></td>
<td>TID</td>
<td>96 bit</td>
</tr>
<tr>
<td></td>
<td>Reserved memory</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>User</td>
<td>N/A</td>
</tr>
<tr>
<td>Data Retention Time</td>
<td>※50years</td>
<td>Tamb = 22°C</td>
</tr>
</tbody>
</table>

※Reference value

5. Reading range (reference only)
Reading range varies by Output Power of Reader/Writer and an antenna.

US, JAPAN band(902~928MHz):2m  ※Reference

*Measurement setup

\[
\text{DUT} \quad \text{Reader/Writer} \quad \text{Antenna}
\]

V750-BD50C04-JP (OMRON)
V740-HS01LA (OMRON)

6. Absolute maximum ratings

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T_{stg}$</td>
<td>Storage temperature</td>
<td>-40</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>$T_{amb}$</td>
<td>Operating temperature</td>
<td>-40</td>
<td>+85</td>
<td>°C</td>
</tr>
</tbody>
</table>
7. Packaging
Packaging unit: 2700 pcs./ bag

8. Contact window

URL: http://www.murata.com/products/rfid
Email: magicstrap@murata.com

For any inquiries/queries, please feel free to contact us.
NOTICE

1. Storage Conditions:
   To avoid damaging, be sure to observe the following points.
   - Store products where the ambient temperature is 15 to 35 °C and humidity 45 to 75% RH.
   (Packing materials, in particular, may be deformed at the temperature over 40 °C.).
   - Store products in non corrosive gas (Cl₂, NH₃, SO₂, NOₓ, etc.).
   - Stored products should be used within 6 months of receipt.

2. Handling Conditions:
   Be careful in handling or transporting products because excessive stress or mechanical shock may break products.

3. Operational Environment Conditions:
   Products are designed to work under normal environmental conditions (ambient temperature, humidity and pressure). Therefore, products have no problems to be used under the similar conditions to the above-mentioned. However, if products are used under the following circumstances, it may damage products and leakage of electricity and abnormal temperature may occur.

   - In an atmosphere containing corrosive gas (Cl₂, NH₃, SO₂, NOₓ, etc.).
   - In an atmosphere containing combustible and volatile gases.
   - In a dusty environment.
   - Direct sunlight
   - Water splashing place.
   - Humid place where water condenses.
   - In a freezing environment.

   If there are possibilities for products to be used under the preceding clause, consult with Murata before actual use.

   If static electricity is added to this product, degradation and destruction may be produced. Please use it after consideration enough so that neither static electricity nor excess voltage is added at the time of an assembly and measurement.

   If product malfunctions may result in serious damage, including that to human life, alternative measures of the operation and design must be taken to secure the safety.
4. Cleaning Conditions:
If the cleaning will be applied, please check with Murata in advance since the product may degrade or get broken.

5. Limitation of Applications:
Please contact us before using our products for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

(1) Aircraft equipment
(2) Aerospace equipment
(3) Undersea equipment
(4) Power plant control equipment
(5) Medical equipment
(6) Transportation equipment (vehicles, trains, ships, etc.)
(7) Traffic signal equipment
(8) Disaster prevention / crime prevention equipment
(9) Data-processing equipment
(10) Application of similar complexity and/or reliability requirements to the application listed in the above.

⚠️ Note:
Please make sure that your product has been evaluated and confirmed against your specifications when our product is attached to your product.

All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.