**SDTR1103-HF2**

**SMO Transponder for NFC applications**

11.8x3.6x4.2-5mm MAX (1mH – 20mH)

**NFC ANTENNAS**

**FEATURES**

The SDTR1103-HF2 Series of Surface Mount ferrite wound inductor is the best solution when high electrical and mechanical performance is needed. Its length and cross sectional area are optimized to achieve the maximum sensitivity in the coil axis.

The construction of the coil offer high mechanical performance due to the plastic base and ferrite laminate.

**CHARACTERISTICS**

- High stability in temperature
- Operation temperature (-40ºC to +85 ºC)
- Good mechanical performance
- Drop test: more than 500 times x 1 meter.
- Taped & Reel: 3000pcs / reel.

**APPLICATIONS**

- RFID readers at 13.56MHz.
- NFC applications at 13.56MHz.

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**SPECIFICATIONS**

**DIMENSIONS (mm)**

**RECOMMENDED PAD-LAYOUT**

**ELECTRICAL SPECIFICATIONS** (1μH – 20μH)

<table>
<thead>
<tr>
<th>Inductance (μH)</th>
<th>Q min.</th>
<th>SRF (MHz)</th>
<th>DRC Max (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 ± 10%</td>
<td>20</td>
<td>25</td>
<td>0.286</td>
</tr>
<tr>
<td>2.0 ± 10%</td>
<td>20</td>
<td>25</td>
<td>0.4345</td>
</tr>
<tr>
<td>3.0 ± 10%</td>
<td>20</td>
<td>25</td>
<td>0.506</td>
</tr>
<tr>
<td>6.00 ± 10%</td>
<td>20</td>
<td>25</td>
<td>0.704</td>
</tr>
<tr>
<td>20.00 ± 10%</td>
<td>20</td>
<td>25</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Inductance, Q factor, DCR and SRF measured with an LCR meter HP 4887A.