Tx Wireless Charging Coil Design

**FEATURES:**
- Wireless Charging Transmitter Coil (6.3μH)
- Available in different styles
- High Q for maximum power transmission
- Durable construction
- RoHS Compliant
- High saturation powdered iron - not affected by permanent locating magnets

**APPLICATIONS:**
- Batteries and Battery Chargers
- Consumer Electronics
- Smart Watches
- Universal wireless charging projects
- Wireless Charging Stations
- Mobile Phones & Charging Accessories
- Power Tool Manufacturers

**DESCRIPTION & KEY ELECTRICAL SPECIFICATIONS**

The JH-H38-T-A5-R is a Wireless Charging Coils that can be used in transmitter applications. This is a single coil design with inductance of 6.3μH.

**Maximum Ratings**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Range</td>
<td>T = -25°C ~ 85°C, RH ≤ 70%</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-25°C~85°C, 90%RH (Max.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Inductance</th>
<th>DC Resistance</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWCCA-12R12H11-C01-B</td>
<td>6.3μH ±10%</td>
<td>550 mΩ max</td>
<td>70±10%</td>
</tr>
<tr>
<td>Test Condition</td>
<td>100KHz / 1V</td>
<td>20±10°C</td>
<td>100KHz/1V</td>
</tr>
<tr>
<td>Test Environment</td>
<td>Temperature: 20±10°C, RH: 65%±20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Test Conditions**

Ambient Temperature: 20±10°C, RH: 65±20%.

If any doubt on the results, measurements/tests should be made within the following limits:

Ambient Temperature: 20±2°C, RH: 65±5%

**PART IDENTIFICATION:**

JH - H38 - T - A5 - R

- **Height**: H38 = 3.8mm
- **Feature**: T = Coil
- **Design Code**: A5
- **Shape**: R: Round

---

All material meet RoHs Standard
**OUTLINE DIMENSIONS:**

<table>
<thead>
<tr>
<th>Item</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spec</td>
<td>20.5 Ref</td>
<td>43 Ref</td>
<td>50 Ref</td>
<td>5 Ref</td>
<td>35 Ref</td>
<td>3 Ref</td>
<td>3.8 max</td>
<td>1.0 Ref</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Coils</th>
<th>Wire</th>
<th>Number of Turns</th>
<th>Inductance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.08*105</td>
<td>20 REF</td>
<td>6.3±10%μH</td>
</tr>
</tbody>
</table>

**Wave Soldering Profile:** Not suitable for wave soldering

**Manual Soldering:** 350°C Max,

**Packaging:** Box, 200pcs MOQ
STORAGE AND OPERATIONAL CONDITION:

Storage condition
- Recommended storage conditions: -25°C~85°C, 70%RH (Max.)
- Service life: Within the limits of six month from being produced.
- The appearance and solder ability should be check, if product is not in expiry date.

Operation Conditions
- Use condition limit: T=-25°C ~ 85°C, RH≤90%.

NOTE:

i) The parts are manufactured in accordance with this specification. If other conditions and specifications which are required, please contact us for more information.

ii) We will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.

iii) In no case shall JH be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.

iv) When changing your production process, please notify us immediately.

V) This drawings and specifications are the property of JH Electronic Ltd. and shall not be reproduced or used as this the basis for the manufacture or sale of apparatus or devices without permission.

CUSTOMED PRODUCTS

We can customize wireless charging coil according to Qi standard or your requirements. Email us: info@jhcoils.com

ATTENTION: The electronic component is designed and developed for usage in general electronic products only. This products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. We shall not be liable for incidental or consequential damages of any kind.