The Heartbeat of the IoT™

COILS FOR WIRELESS CHARGING & WIRELESS POWER

Applications: robotics, drones, automation systems, power tools, and medical devices | Qi compatible

20W Dual Mode RX Wireless Charging Coil

For use in the SEMTECH LINKCHARGE™ 20 TSDMRX-19V20W-EVM reference design

Abracon’s AWCCA-RX350300-101 wireless charging coil is optimized to meet the requirements of Semtech’s LinkCharge™ 20 TSDMRX-19V20W-EVM reference design board.

As part of Semtech’s complete wireless charging solution delivering up to 85% efficiency at 20W, this coil implements the receive side of the wireless charging solution. Designed for compact applications, it features a 35mm diameter achieving a high power density with low profile 3.15mm max height.

Up to 85% Efficient Power Transfer

- High efficiency
- Reduces heat dissipation
- Minimizes battery charge time

Test Condition: 100KHz/1V
Test Equipment: HP4284A, HP42841A, Agilent 34420A or equivalent
Test Environment: Temperature: 20±15˚C, RH: 65% ±20%

Standard Wireless Charging Coils

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>TYPICAL DIMENSIONS (mm)</th>
<th>MAX HEIGHT (mm)</th>
<th>TYPE RATIO</th>
<th>FUNCTION (TX or RX)</th>
<th>INDUCTANCE (µH)</th>
<th>DC RESISTANCE (mΩ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWCCA-50N50H50-C01-B</td>
<td>Ø 50 x 50</td>
<td>6.0</td>
<td>1 Coil, 1 Layer</td>
<td>RX</td>
<td>15.0µH±10%</td>
<td>150 ± 20%</td>
</tr>
<tr>
<td>AWCCA-20N20H20-C01-B</td>
<td>Ø 20 x 20</td>
<td>2.5</td>
<td>1 Coil, 1 Layer</td>
<td>RX</td>
<td>3.0µH±10%</td>
<td>200 ± 20%</td>
</tr>
<tr>
<td>AWCCA-20N20H20-C03-B</td>
<td>Ø 20 x 20</td>
<td>2.5</td>
<td>3 Coils, 2 Layers</td>
<td>RX</td>
<td>15.0µH±10%</td>
<td>300 ± 20%</td>
</tr>
</tbody>
</table>

Applications for High Power Wireless Charging and Low Profile/Compact

High power applications including robotics, drones, automation systems, power tools, and medical devices, all benefit from the reliable and consistent power delivery to device batteries. With wireless technology, designs are limitless.