2.4, 5 GHz Flexible and PCB Antennas

Designed for fast and easy integration into wireless devices at minimal implementation cost, side and center-fed cable Flexible Antenna enable high-performance RF transmission for the most demanding Wi-Fi applications

Features and Advantages

- **Double sided TESA adhesive**
  Ensures easy “peel and stick” mounting

- **Cable and connector can be customized**
  Provides design flexibility

- **Self adhesive mounting on metal and non-metal surface**
  Enables instant application anywhere on the device

- **UFL-type connector**
  Secures to the application’s device radio

- **Solder pad for Core**

- **Micro-coaxial cable, 100mm**
  Ensures optimum RF performance for easy connectivity to radio devices

- **Solder pad for Ground**

- **Cable and connector can be customized**
  Provides design flexibility

- **Highly compact, side-fed monopole antenna**
  Offers significant space savings while supporting high-performance needs

- **2.4, 5GHz MIMO 2x2 Flexible Antenna**
  (Series 208482)

- **Double sided TESA adhesive**
  Enables easy “peel and stick” mounting

- **UFL-type connector**
  Secures to the application’s device radio

- **Solder pad for Ground**

- **2.4, 5 GHz Wi-Fi Flexible Antenna, 15.00 by 6.00mm, Monopole, Side-fed (Series 206994)**

- **Cable and connector can be customized**
  Provides design flexibility

- **UFL-type connector**
  Secures to the application’s device radio

- **2.4, 5 GHz Wi-Fi PCB Antenna, Monopole, Center-fed (Series 206995)**

- **Self adhesive mounting on metal and non-metal surface**
  Enables instant application anywhere on the device
2.4, 5 GHz Flexible and PCB Antennas

**Features and Advantages**

- **Easy peel and stick**
  Enables instant application on non-metal surface

- **Highly compact**
  Offers significant space savings while supporting high performance needs

- **Topside of the polyflexible antenna**
  Makes for easy peel-and-stick mounting anywhere within the device chassis

- **Cable and connector can be customized**
  Provides design flexibility

- **Micro-coaxial cable**
  (50, 100, 150, 200, 250, 300mm options)
  Extends connectivity for maximum design flexibility

- **Dual band balanced antenna with ground-plane independent design**
  Reduces engineering resources and costs needed to mitigate PCB ground-induced radiation

- **UFL-type connector**
  Secures to the application’s device radio

- **5.9GHz Flexible Antenna**
  (Series 211996)

- **2.4, 5 GHz Wi-Fi Flexible Antenna, Fully Balanced, Dipole-style, Side-fed**
  (Series 204281)

- **2.4, 5 GHz Wi-Fi PCB Antenna, Fully Balanced, Dipole-style, Center-fed**
  (Series 146187)

- **2.4, 5 GHz Flexible Antenna, Fully Balanced, Dipole-style, Center-fed**
  (Series 146153)

- **Double-sided adhesive on the antenna reverse**
  Enables instant application anywhere on the inner wall of the device chassis by just removing its tape liner

- **4x4 MIMO design**
  Delivers superior connectivity

- **2.4/5GHz MIMO 4x4 FLEXIBLE ANTENNA**

- **Cable and connector can be customized**
  Provides design flexibility

- **Double-sided 3M adhesive**
  Enables easy “peel and stick” mounting

- **Rigid PCB antenna with two holes on both sides for screw-nut mounting**
  Offers more robust securing of antenna to device chassis in rugged applications
2.4, 5 GHz Flexible and PCB Antennas

Applications

Consumer
  Connected Home
  Smart Home
Automotive
  Connected Vehicle
  Comfort and Infotainment
Industrial
  Smart Cities

Specifications

**REFERENCE INFORMATION**
Reference Information
Packaging: PET Film
Mates with: Surface-mount, micro-coaxial jack receptacle (Series: 73412)
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: No

**ELECTRICAL**
RF Power (Watt): 2
Return Loss: < -10 dB
  Refer to Product Specifications (212330)
Average Total Radiation Efficiency (%):
  Refer to Product Specifications
Peak Gain (dBi): Refer to Product Specifications
Input Impedance (ohms): 50

**MECHANICAL**
Refer to Product Specifications

**PHYSICAL**
Material: Flexi (146153, 204281, 208482, 206994, 212330 and 211996); FR4 PCB (146187 and 206995)
Plating:
  Refer to Sales Drawings
Operating Temperature: -30 to +85°C
  -40 to +85°C (206995, 208482, 211996, 212330)
## 2.4, 5 GHz Flexible and PCB Antennas

### Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Substrate</th>
<th>Cable Feed</th>
<th>Dimensions (mm)</th>
<th>Cable Lengths (mm)</th>
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</thead>
<tbody>
<tr>
<td>206994</td>
<td>Flexi material</td>
<td>Side</td>
<td>15.00 by 6.00</td>
<td>100</td>
</tr>
<tr>
<td>206995</td>
<td>PCB (FR4)</td>
<td>Center</td>
<td>20.50 by 20.50 by 3.00</td>
<td>150</td>
</tr>
<tr>
<td>208482</td>
<td>Flexi material</td>
<td>Center</td>
<td>55.20 by 19.20 by 0.16</td>
<td>100, 150, 200</td>
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<tr>
<td>204281</td>
<td>Flexi material</td>
<td>Side</td>
<td>35.00 by 11.00 by 0.10</td>
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</tr>
<tr>
<td>146153</td>
<td>Flexi material</td>
<td>Center</td>
<td>34.90 by 9.00 by 0.10</td>
<td></td>
</tr>
<tr>
<td>146187</td>
<td>PCB (FR4)</td>
<td>Center</td>
<td>40.95 by 9.00 by 0.70</td>
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<tr>
<td>211996</td>
<td>Flexi material</td>
<td>Center</td>
<td>16.40 by 7.60 by 0.16</td>
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</tr>
<tr>
<td>212330</td>
<td>Flexi material</td>
<td>Center</td>
<td>70.00 by 20.00</td>
<td>100, 150, 200</td>
</tr>
</tbody>
</table>

[www.molex.com/link/antenna_iot.html](http://www.molex.com/link/antenna_iot.html)

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