**Spring Clips for Mobile Devices**

*Wide working range, high durability*

High durability spring clips offer smartphone makers maximum cost savings with superb interconnect performance over a wide working range.

**Features and Benefits**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide working range from 0.30 to 2.00mm (combined series)</td>
<td>Offers greater design flexibility with specific loading control</td>
</tr>
<tr>
<td>Anti-snag design (105386, 105439)</td>
<td>Prevents contact damage during assembly processing and yield loss</td>
</tr>
<tr>
<td>Selection of clip widths from 1.00 to 2.00mm (combined series)</td>
<td>Supports small PCB applications</td>
</tr>
<tr>
<td>1,500 durability cycles (105386)</td>
<td>Delivers sustained high performance</td>
</tr>
<tr>
<td>Kinked ribs (105384)</td>
<td>Prevent solder wicking</td>
</tr>
<tr>
<td>Device-to-PCB grounding contact</td>
<td>Reduces EMI noise and electrostatic discharge</td>
</tr>
<tr>
<td>RF-to-PCB contact</td>
<td>Provides greater cost savings when used with non-soldered wire-less devices (example: antennas)</td>
</tr>
</tbody>
</table>

**Applications**

*Smartphone and Mobile Devices*

Consumer / Data / Telecom / Networking

- Digital cameras
- Digital video recorders
- Wireless LAN devices
- Set top boxes
- Small Office/Home Office (SOHO) switches and routers

**Industrial**

- Surveillance, security cameras and systems
- Point-Of-Sale (POS) scanners

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From right to left: Anti-snag spring clips with working range of 0.55 to 1.05, 1.40 to 2.00 and 1.25 to 1.75mm respectively (Series 105439).

Reinforced, anti-snag spring clip, 1.00mm width (Series 105386).

Kinked ribs, closed tip spring clip, 2.00mm width (Series 105384).

Small Office/Home Office (SOHO) Switches and Routers

GPS Devices

Smartphones and Tablets PCs

Security Cameras
Spring Clips for Mobile Devices
Wide working range, high durability

Product Features

Gold plating on the mating contact improves both mechanical and electrical performance of the interconnect when mated (Series 105386)

Anti-solder wicking and small solder area are hallmarks of this competitively priced interconnect (Series 105384)

The reduced area on the dimple provides higher contact pressure between mated device and spring clip for enhanced contact reliability

Closed tip prevents accidental snagging of terminal during processing operations

Stopper features on both sides of the clip prevent excess deflection of the terminal when pushed from sideways

Gold plating on the mating contact improves both mechanical and electrical performance of the interconnect when mated (Series 105386)

Anti-solder wicking and small solder area are hallmarks of this competitively priced interconnect (Series 105384)

The tip is closed to prevent accidents during processing

Kinked ribs on both sides of the clip prevent solder-wicking

Stopper features prevent excess deflection of the clip

Anti-snag Spring Clip
Working Range: 1.25 to 1.75mm
(105439-0004)

Anti-snag Spring Clip
Working Range: 0.55 to 1.05mm
(105439-0002)

Anti-snag Spring Clip (viewed from opposite direction)
Working Range: 1.40 to 2.00mm
(105439-0005)

Closed tip prevents accidental snagging of terminal during processing operations

(Yellow circle) Stopper features on each side of the clip prevent lateral deflection of clip during assembly processing

Dimple increases contact pressure between mated device and spring clip for higher contact reliability

Stopper feature prevents contact tip from bending backward when depressed

Side walls prevent lateral deflection of clip during assembly processing
Specifications

Reference Information
- Packaging: Tape on reel
- Mates With: Electronic and RF devices depending on customer application
- Designed In: Millimeters
- RoHS: Yes
- Halogen Free: Yes
- Glow Wire Compliant: No

Electrical
- Voltage (max.): 10 Volts DC
- Current (max.):
  - 1.5 A (105386, 105439); 1.0A (105384)
- Low Level Contact Resistance (max.):
  - 50 milliohm (105386)
  - 60 milliohm (105384)
  - 75 milliohm (105439)

Mechanical
- Normal Force:
  - 0.25N minimum before durability (105384 and 105386)
  - 0.20N minimum before durability (105439)
  - 0.20N minimum after durability (all series)
- Durability: 1500 cycles
- Vibration:
  - 3.10G (RMS) between 20 to 500Hz, 15 minutes

Physical
- Housing: None
- Contact: Stainless Steel
- Plating:
  - Contact Area — Refer to table
  - Soldering Area — Gold (Au) Flash
  - Underplating — Nickel (Ni) overall
- Operating Temperature: -40 to +85°C

Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Contact Gold (Au) plating (µm, min.)</th>
<th>Working Range (mm)</th>
<th>Uncompressed Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>105386-0003</td>
<td>0.25</td>
<td>0.40 to 0.80</td>
<td>1.10</td>
</tr>
<tr>
<td>105386-0004</td>
<td>1.00</td>
<td>0.40 to 0.80</td>
<td>1.10</td>
</tr>
<tr>
<td>105384-0001</td>
<td>0.50</td>
<td>0.70 to 1.10</td>
<td>1.40</td>
</tr>
<tr>
<td>105384-0002</td>
<td>0.30 to 0.55</td>
<td>0.55 to 1.05</td>
<td>1.25</td>
</tr>
<tr>
<td>105439-0002</td>
<td>0.25</td>
<td>1.25 to 1.75</td>
<td>1.95</td>
</tr>
<tr>
<td>105439-0005</td>
<td></td>
<td>1.40 to 2.00</td>
<td>2.20</td>
</tr>
</tbody>
</table>

www.molex.com/link/springclips.html