

Spring Clips for Mobile Devices

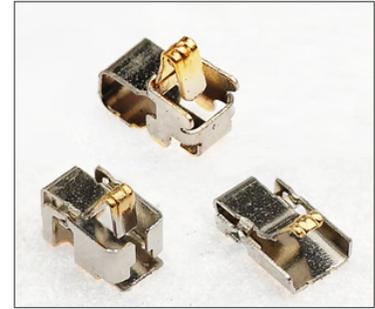
Wide working range, high durability



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

Features and Benefits

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



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)

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



Small Office/Home Office (SOHO) Switches and Routers



GPS Devices



Smartphones and Tablets PCs



Security Cameras

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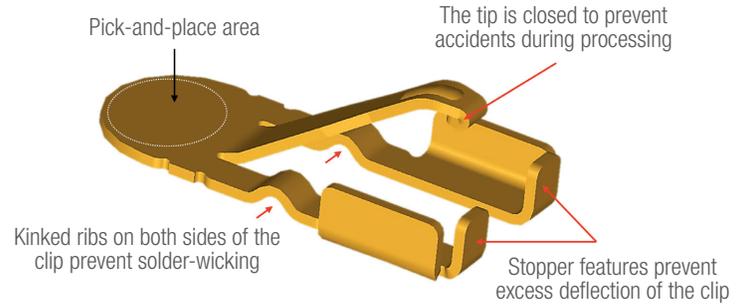
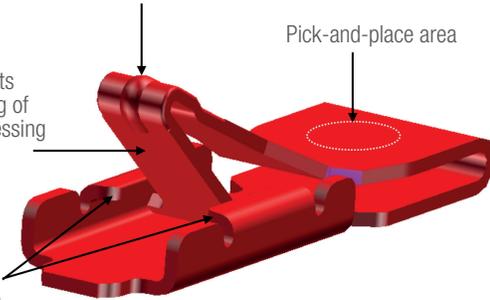


Product Features

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

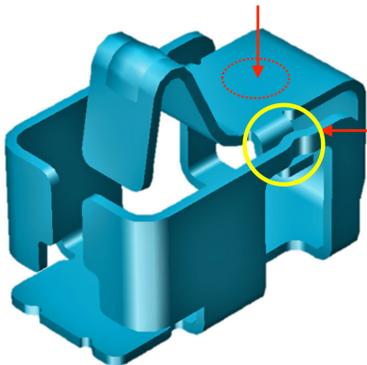
Stopper features on both sides of the clip prevent excess deflection of the terminal when pushed from sideways



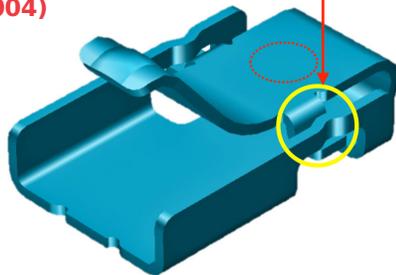
Gold plating on the mating contact improves both mechanical and electrical performance of the interconnect when mated (Series 105386)

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

Pick-and-place area (dotted red circle)

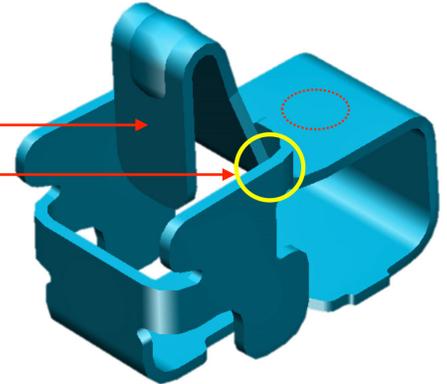


Anti-snap Spring Clip
Working Range: 1.25 to 1.75mm
(105439-0004)



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

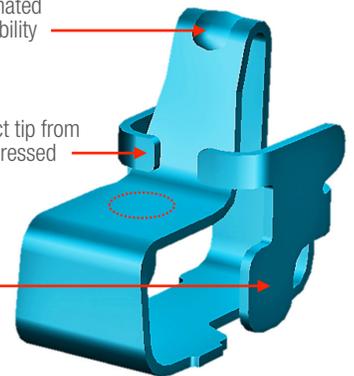
Closed tip prevents accidental snagging of terminal during processing operations
(Yellow circle) Stopper features on each side of the clip prevent lateral deflection of clip during assembly processing



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



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

Spring Clips for Mobile Devices

Low profile, high durability



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)

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

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

Ordering Information

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

www.molex.com/link/springclips.html