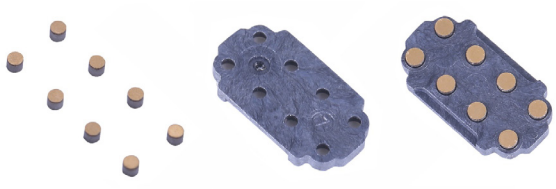
Contact Pucks

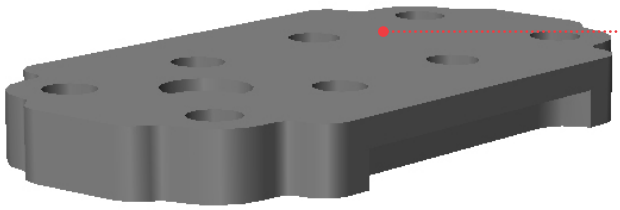
molex

Industry-leading miniature contact pucks offer superb contact quality and reliable docking-based charging of wearable and mobile devices

Features and Advantages



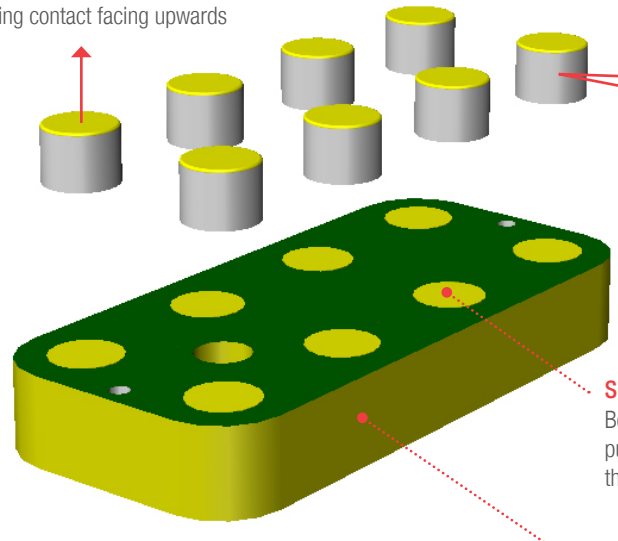
Left to right: Contact pucks, pick-and-place cap (carrier) and pucks (solder-side) on cap



Pick-and-Place Cap
Puck-carrier for pick-and-place assembly operations

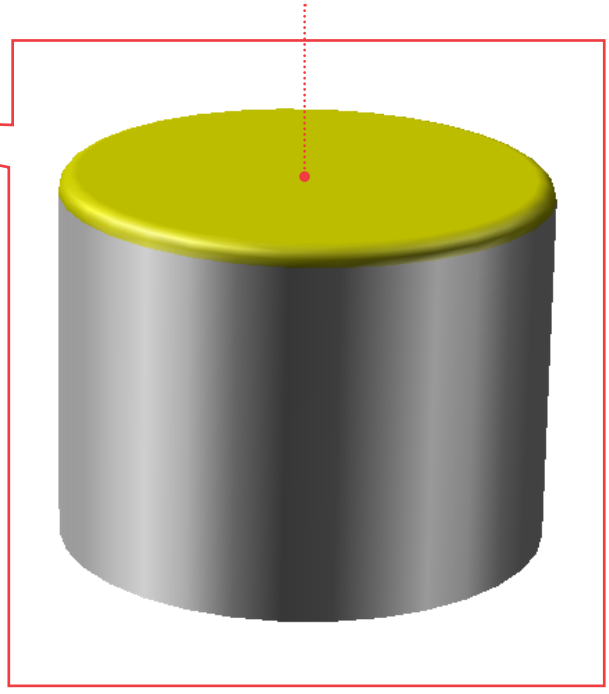
Highly even gold-plated mating surface
Provides excellent electrical contact and mechanical hardness ideal for docking applications

Puck mating contact facing upwards



SMT pad
Bottom side of contact puck is soldered onto this area

Interposer
Elevates the pucks to the mating height required by the application



Magnified view of the puck's mating surface

The highly even mating surface of the puck is vital for good metal-to-metal contact and high electrical conductivity during charging (on docking stations). The smoothness of the puck surface is not manufacturable with ordinary machining. By profiling the puck such that the original thickness of the puck material is maintained, Molex is able to achieve a surface quality and finish not achievable by machining or polishing techniques.

Applications

Consumer (Wearable Devices)
- Electronic bracelets
- Smart watches
- Activity trackers
- Fitness gadgets

Smart phones and mobile devices

Medical
- Telehealth monitoring devices

Exercise wearables

Smart watches

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Specifications

REFERENCE INFORMATION
Packaging: Tape-and-Reel
Mates With: Docking station contacts
Designed In: (Millimeters or Inches)
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

ELECTRICAL
Voltage (max.): 50V DC
Current (max.): 0.5A per contact
Contact Resistance (max.): 10 milliohms

PHYSICAL
Housing (Carrier or Cap): LCP E130i
Contact (Puck): Phosphor Bronze
Plating: Contact Area — 0.1 micron Gold (Au) min. over full surface and 0.76 micron Gold (Au) within 0.60mm internal diameter
Solder Area — 0.05 micron Gold (Flash) within 1.00mm internal diameter of PCB solder area
Underplating — Full Nickel (Ni) with 1.25 micron Nickel within contact and solder areas
PCB Thickness (Interposer): Custom-specific
Operating Temperature: -20 to +70°C

MECHANICAL
Pucks/Housing Contact Retention Force (min.): 1.0N
Peeling Force (PCBA): 20N min.

Ordering Information

Series No.	Part No.	Pucks Height	Description
105402	105402-0022	1	Pucks with Cap

www.molex.com/link/contactpucks.html

Order No. 987651-8351 APS/0k/GF/2018.04