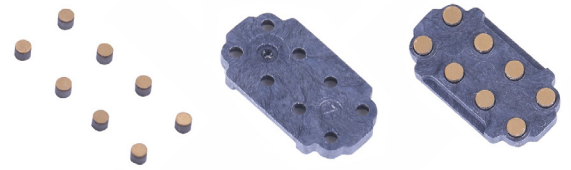


# Contact Pucks

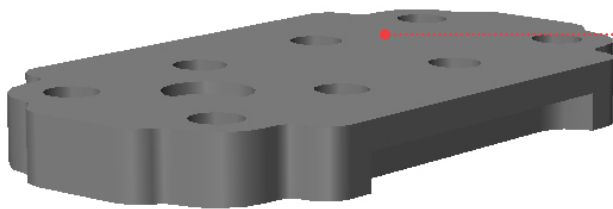


Industry-leading miniature contact pucks offer superb contact quality and reliable docking-based charging of wearable and mobile devices

## Features and Advantages



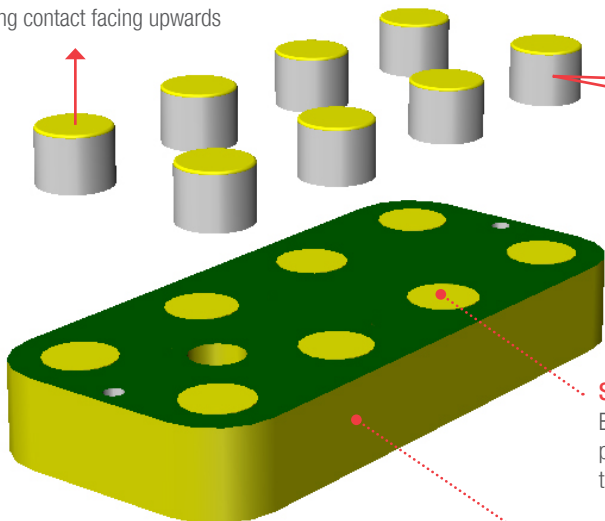
Left to right: Contact pucks, pick-and-place cap (carrier) and pucks (solder-side) on cap



### Pick-and-Place Cap

Puck-carrier for pick-and-place assembly operations

Puck mating contact facing upwards



### SMT pad

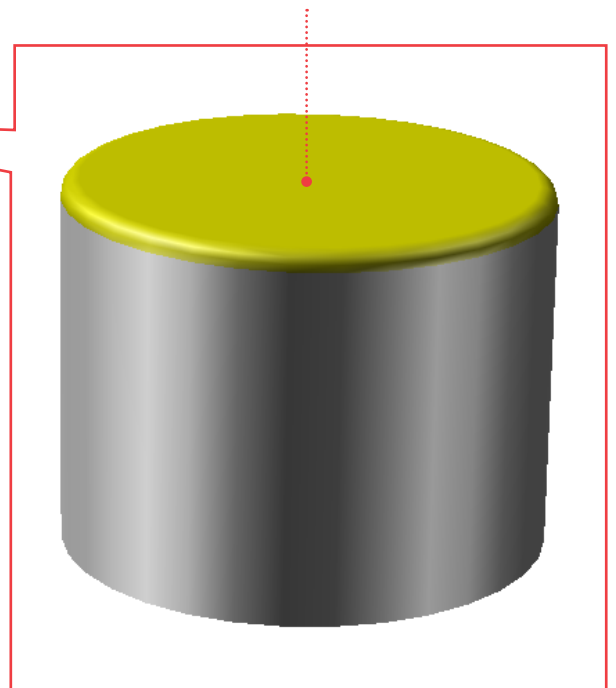
Bottom side of contact puck is soldered onto this area

### Interposer

Elevates the pucks to the mating height required by the application

### Highly even gold-plated mating surface

Provides excellent electrical contact and mechanical hardness ideal for docking applications



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

## 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
<a href="#">105402</a>	105402-0022	1	Pucks with Cap