

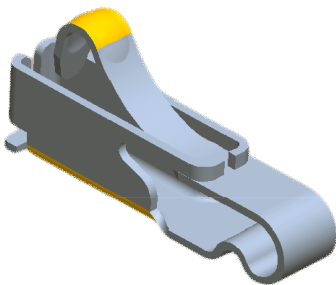
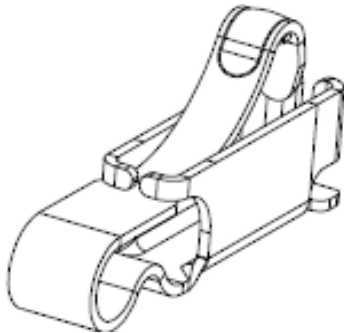
APPLICATION NOTE

www.ittcannon.com Universal Contact for Angular Alignment Applications

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The Challenge

ITT's Universal Contacts are an independent SMT device, which provides an electrical connection between a device and a PCB in a **vertical condition**. The challenge was to design a new contact, which would allow for angular mating within the same standard UC footprint and .3N of pre-load force.



The ITT Solution ...

By creating a sloped front beam and verifying it's functionality through Finite Element Analysis, the UC-S was designed, proto-typed, tooled and produced within a four week timeframe allowing the end customer to produce 2.5 million handheld units within 60 days. The slope beam allows for a 90° angle of mate.

Product Features

- 2.5mm free height with 1.0 mm of deflection
- .3N of pre-load force minimum
- Solder well that prevents wicking of flux-solder into the critical beam area
- Domed contact for high hertz forces
- X-Y-Z movement with mating device
- Side Wings preventing overstressed conditions of the beam
- 1.35mm pitch between contacts

Applications

- Handset
 - Solderless component interconnect
 - I/O interconnect
 - Battery Contact
 - Antenna Contact
- Memory Stick
- Smoke Detectors
- GPS board to screen interconnect
- Keyfob
- CT Scan equipment
- Ground Contact
- Board to Board Interconnect
- No change in the overall dimension to the standard UC

For application assistance, please contact:

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