

Amphenol

COMMUNICATIONS SOLUTIONS

FCI Basics

Universal Contact

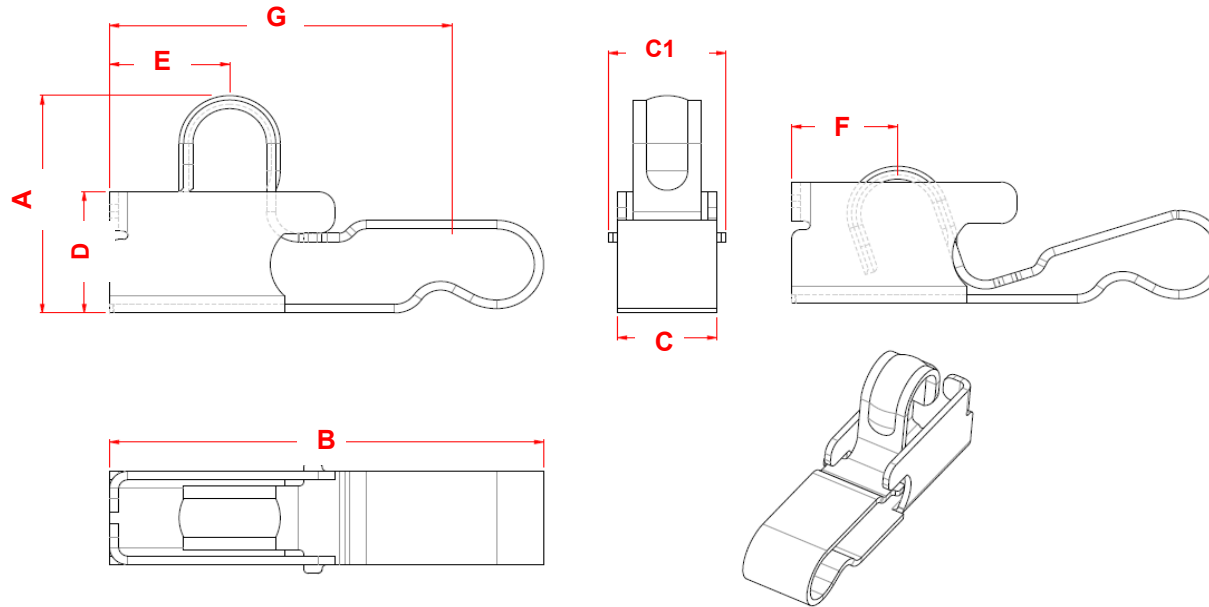
Product presentation

 **FCi Basics**



Universal contact is a widely usage, higher reliability, lower cost interconnect solution.

- A single piece of stamped and formed copper alloy, for lower power delivery and low speed signal contact
- Free heights ranging from 1.3mm to 3.5mm, working height 0.5mm to 2.2mm
- 2500 mating cycles
- Low contact resistance, 2A max continuous current rating (10123973-004RLF is 1A)
- Available in BeCu or TiCu
- Suitable for handled device charging, antenna to PCB connection, etc...



Part Number	A	B	C	C1	D	E	F	G (pick and place nozzle location)	Working Height
10123973-004RLF	1.20 +0.15/-0	2.60±0.10	1.10±0.10	/	0.40±0.05	0.32±0.10	0.15min	1.75 Ref.	0.50±0.05
10094594-009RLF	1.30 ±0.10	3.48 ±0.10	1.40 ±0.10	1.50 ±0.10	0.77 ±0.10	0.80 ±0.20	0.30 min	2.5 Ref.	1.00 ±0.10
10104320-009RLF	1.30 ±0.10	3.48 ±0.10	1.10 ±0.10	1.30 ±0.10	0.72 ±0.10	0.80 ±0.20	0.30 min	2.5 Ref.	1.00 ±0.10
10115748-009RLF	1.55 ±0.10	3.48 ±0.10	1.40 ±0.10	1.50 ±0.10	0.87 ±0.10	0.80 ±0.20	0.30 min	2.5 Ref.	1.02 ±0.10
10103955-009RLF	1.80 ±0.10	3.40 ±0.13	0.90 ±0.10	1.10 ±0.10	0.95 ±0.10	0.84 ±0.20	0.47 min	2.7 Ref.	1.10 ±0.10
10125000-009RLF	2.10 ±0.10	3.40±0.13	1.10 ±0.10	1.20 ±0.13	1.20 ±0.10	0.90 ±0.20	0.30 min	2.2 Ref.	1.60 ±0.05
10104319-009RLF	2.50 ±0.10	4.87 ±0.15	0.98 ±0.10	1.28 ±0.10	1.40 ±0.10	1.19 ±0.20	0.74 min	2.8 Ref.	1.55 ±0.10
10104321-009RLF	3.50 ±0.10	5.00 ±0.13	1.10 ±0.10	1.40 ±0.10	2.00 ±0.10	1.65 ±0.20	0.50 min	3.4 Ref.	2.20 ±0.10

Specifications

- Product Specification: GS-12-500

Electrical Performances

- LLCR < 20mΩ (10123973-004RLF is < 50 20mΩ)
- Current Rating: 2A max continuous current rating (10123973-004RLF is 1A)
- Voltage rating: 12V

Mechanical Performance

- Durability: 2,500 cycles when mated with a PCB pad with 0.05/0.15um Au
- Normal force: refer to the product specification

Materials

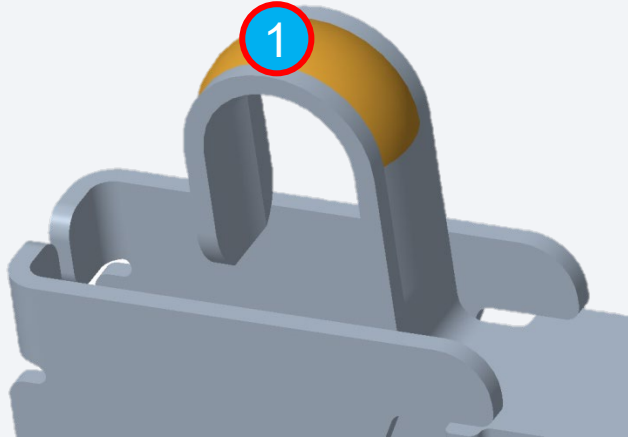
- Base material: Copper Alloy or Stainless Steel
- Plating:
 - Contact area: Plating shall be gold or GXT or Tin over Ni under plate.
 - Solder tail: Plating shall be gold flash or Tin over Ni under plate.

Environmental

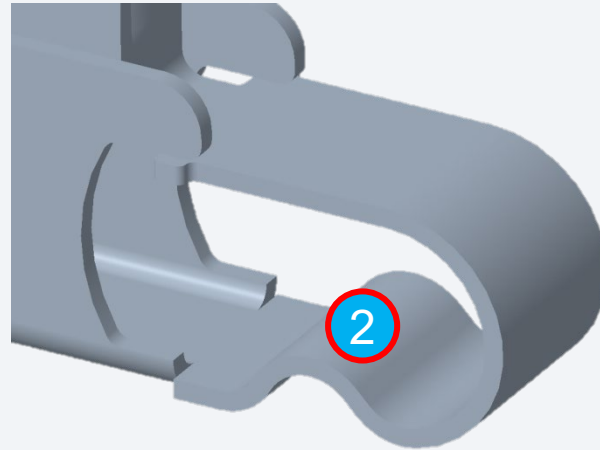
- Operating Temperature: -40°C to +85°C
- Storage Temperature: -40°C to +85°C
- RoHS compliant
- Lead free, Halogen free

Packaging

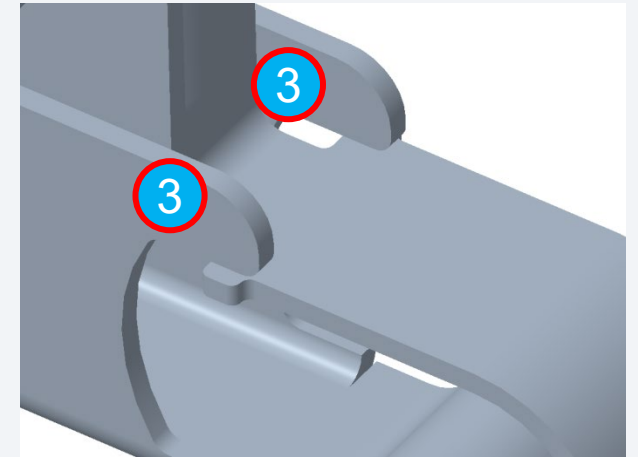
- Tape and reel



Domed contact points for good normal force and low contact resistance



Solder well design prevents solder paste and flux wicking up the contact



The “side wings” protect the moving beam and prevent the beam from being overstressed and damaged

Consumer

- Mobile Phone



- POS



- Bluetooth tracker



Medical

- Covid tester



- Breathing machine



Telecom

- Radio



THANKS