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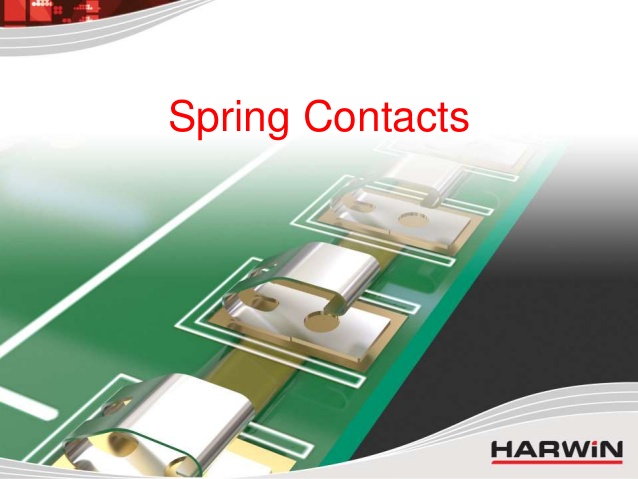
# USB 2.0 Hub IC

* TUSB2046x 4-Port Hub for the Universal Serial Bus With Optional Serial EEPROM Interface datasheet (Rev. L)

# Spring Fingers

**Pdf link**: <https://www.te.com/content/dam/te-com/documents/consumer-devices/global/6-1773460-8_Spring_Fingers-qrg.pdf>

Spring fingers (also known as shield fingers, grounding springs, universal ground contacts or antenna clips) can be used in all types of small printed circuit board applications across all industries. A spring finger is a single contact, surface mountable internal connector with multiple functions on a PCB. Spring fingers can be used for antenna feeds, low voltage electrical connections and grounding or shielding. They are beneficial in preventing EMI noise and static caused by speakers, motors, microphones or any other type of connector that can cause vibration within an application.



## Types of spring fingers

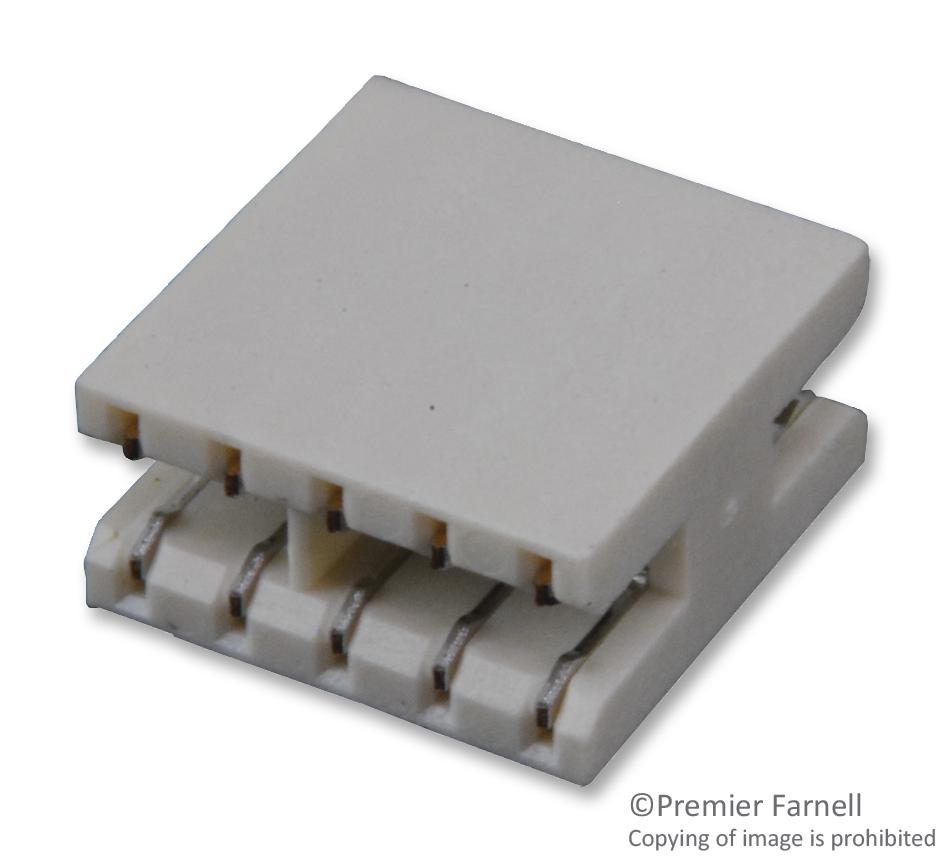
1. Standard-flat Contact
2. Pre-loaded Contact
3. Ultra-low Profile
4. Ultra-small Contact

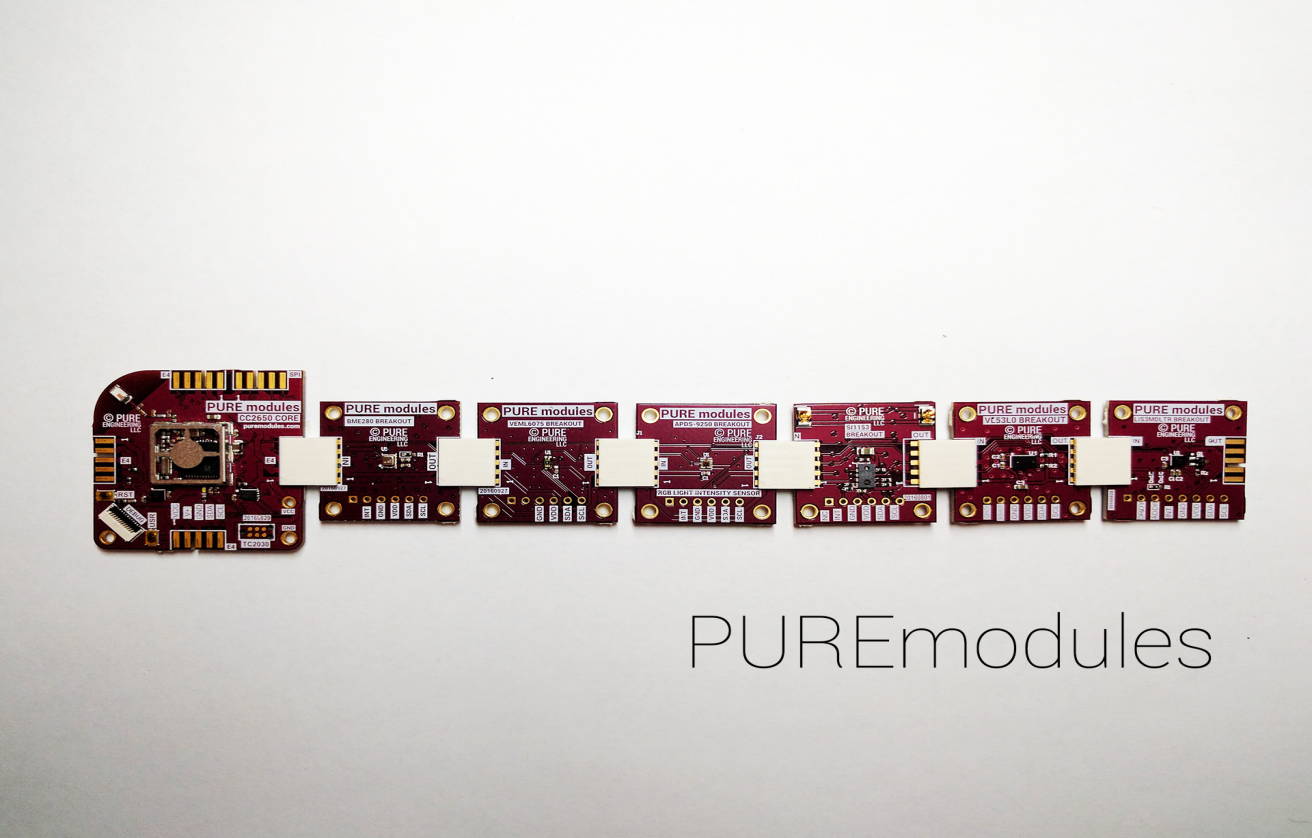
# Short listed connectors

**AVX INTERCONNECT 009159010061916 Card**

Card Edge Connector, Dual Side, 1.6 mm, 10 Contacts, Surface Mount, Right Angle, Solder

Maximum contacts:10





Obsolete:date at which manufacturing is going to end.-Not available

**Product Overview**

The 009159010061916 is a 10-way open ended Card Edge Connector with tin-plated phosphor bronze contacts. The series 00-9159 connector is a 2mm with single contacts that straddle the PCB to make electrical connection on both the top and bottom side of the board. It provides the highest density to reliably connect two in-line PCB's together. More importantly, the increased pin count allows for more flexibility in mixing and matching power and signal lines.

UL94V-0 Flame-rated nylon 46 insulator

Central polarizing/location rib assures proper mating and PCB location

300VAC Voltage rating

High current capabilities (3A - 4p/6p and 2.5A - 8p/10p)

Economical high force tin-to-tin contact interface

**Applications**

LED Lighting, Commercial, Industrial

Quantity Price

1+ Rs.72.80

50+ Rs.70.06

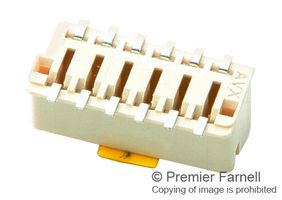
100+ Rs.60.99

500+ Rs.55.42

1000+ Rs.51.20

### AVR INTERCONNECT 009159006551906

Card Edge Connector, Single Side, 1.6 mm, 6 Contacts, Surface Mount, Straight, Solder

  
Quantity Price

1+ Rs.94.21

10+ Rs.78.12

50+ Rs.74.86

100+ Rs.65.09

500+ Rs.63.21

900+ Rs.53.31

### USB 3.0- 9pin connector



Cost:94rs

### AVX Corporation 13 9159006101916

<https://www.mouser.in/ProductDetail/AVX/139159006101916?qs=Dc2RuoSqrEW%252BfVsIzni8kQ%3D%3D>

The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. These single sided SMT connectors are perfect for both FR4 and metal boards where you need to butt the boards up together to minimize separation. Availability of both white and black insulation colors make them perfect for lighting as well as industrial applications. With sizes from 2p-6p, these high reliability connectors boast gold plated beryllium copper receptacle contacts for harsh environments.



Qty Rate

1 ₹124.83

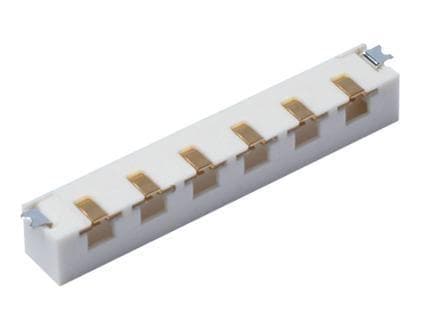
10 ₹113.15

50 ₹110.23

100 ₹97.09

AVX Corporation 209159006101916

Horizontal Socket: BTB 20-9159



Qty. Rate

1 ₹115.34

10 ₹105.12

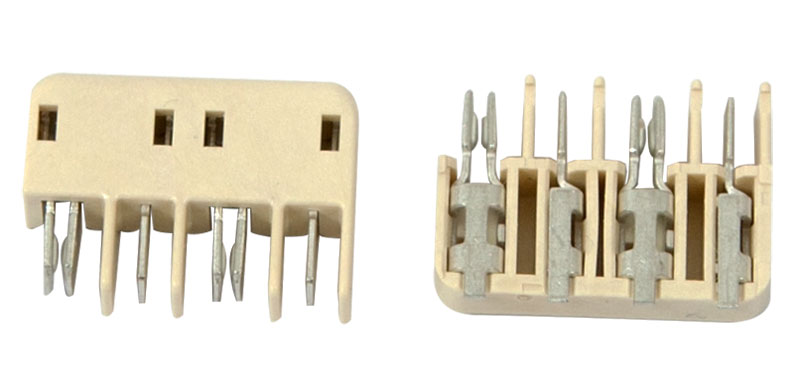
50 ₹102.20

100 ₹89.79

500 ₹69.06

**Brick R Knowledge:** [**https://www.brickrknowledge.de/fr/bricks/active-basic/**](https://www.brickrknowledge.de/fr/bricks/active-basic/)

Youtube video:<https://youtu.be/XAMB9qxogMY>



**Similar model brick connector from Alibaba:** [**https://www.alibaba.com/product-detail/Quick-connect-Blade-type-pcb-smd\_1850369566.html**](https://www.alibaba.com/product-detail/Quick-connect-Blade-type-pcb-smd_1850369566.html)

Quick connect Blade type pcb smd terminal block



**Hermaphroditic Blade**

**And Receptacle connector**

**Board-to-Board**

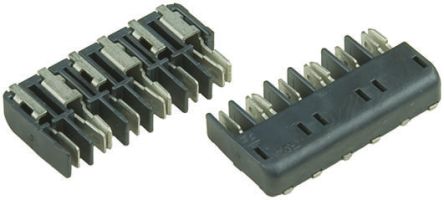
Specification

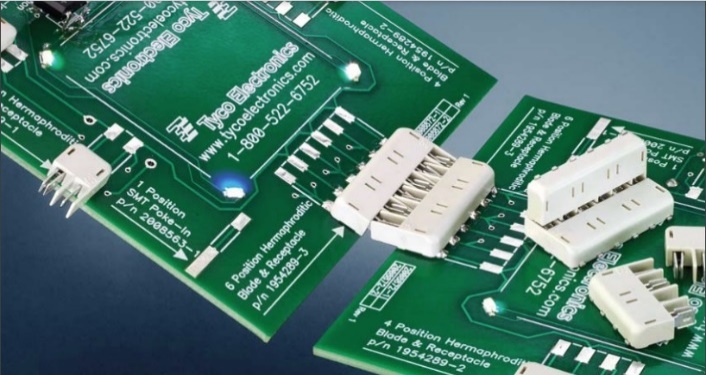
|  |  |
| --- | --- |
| Electrical Specification: | |
| Style | Board to Board |
| Type | Blade and Receptacle |
| Number of pins | 2 .4 .6 |
| Contact Material | Copper Alloy, tin over nickel plated |
| Housing Material | 94V0 high temperature resistant thermoplastic |
| Rated voltage | 125V AC / 125V DC |
| Dielectric Withstanding Voltage | 1500VAC |
| Operating temperature | -40° to +105° C |
| Maximum current | 5A |
| Mounting Type | Surface Mount, Right Angle |
| Housing Color | White |
| Packaging | Tape & Reel |

TE Connectivity, Hermaphroditic Board to Board, Surface Mount, Rated At 6A, 125 V ac/dc

<https://www.te.com/usa-en/products/connectors/lighting-connectors/intersection/hermaphroditic-connectors.html?source=header-match&tab=pgp-story>

<https://in.rsdelivers.com/product/te-connectivity/1-1954289-2/te-connectivity-hermaphroditic-board-to-board/6860855?gclid=EAIaIQobChMItsi8iMuf7QIV0nwrCh0bXwGEEAQYASABEgIp6vD_BwE&gclsrc=aw.ds>





* This connector mates and unmates (vertically and horizontally) to itself and is coplanar.It is actually manufactured by TE connectivity.Tape and reel packaged product is compatible with high speed SMT and reflow solder process.
* Available in 2, 4 and 6 positions to connect power, signal and data.

*Availability*

* It is available through Mouser electronics.Two models are available:
* Model no:1954289-3, Cost:Rs148.92 per piece
* Model no:2213614-3, Cost:Rs254.04 per piece(This is the latest model with small difference)

Perpendicular Mother/Daughter – Inverted Thru Board Card Edge: 00-9159

<https://www.avx.com/products/connectors/board-to-board/inverted-thru-board-card-edge-00-9159/>



* Available 2p-6p for added design functionality and color control in bulb applications
* Low profile top mounted design does not interfere with LEDs
* Gold plated BeCu contact system for high reliability in harsh environments
* Accepts both 0.8mm and 1.6mm PCB’s for added design options

Pluggable Terminal Blocks ZEC 1.5/ 6-5.0-LPV

<https://www.google.com/url?q=https://www.mouser.in/ProductDetail/Phoenix-Contact/1898305?qs%3D71zq8cT40IQ55Ox2N2UCWg%3D%3D&source=gmail&ust=1606798187301000&usg=AFQjCNHYwK_OXbuMQLtE1-ynM3cmflefZg>



₹1,005.94/unit

# STEM kits providing companies

1. Little bits
2. Creation create
3. Snapcircuits
4. Brick R Knowledge
5. Mind storms