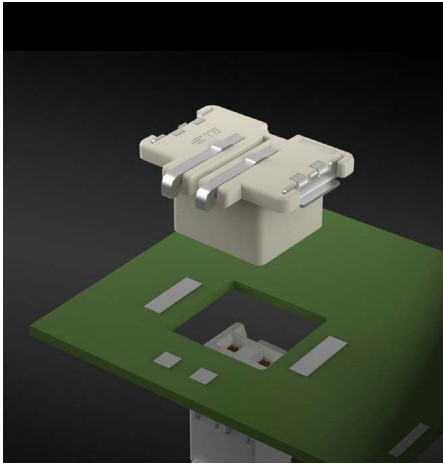


INVERTED THRU BOARD INTERCONNECTS

TE Connectivity (TE) offers inverted thru board connectors that can help your power delivery upside down. Our unique headers help enable power delivery from the underside of your printed circuit boards (PCBs) and LED arrays significantly reducing top surface wire management issues. Leveraging existing TE connector product families, our inverted headers take advantage of reliable TE connector systems. TE's inverted thru board connectors are the highly reliable solution for low profile applications commonly required in various solid state lighting LED modules and non-lighting related printed circuit boards.

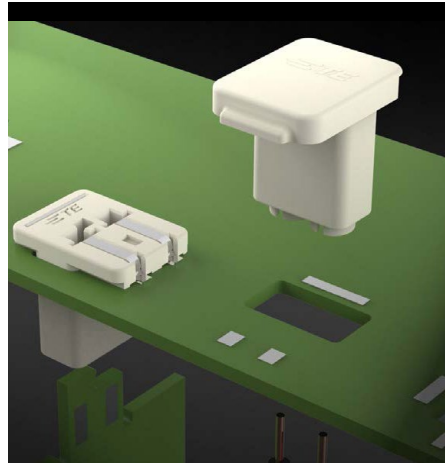
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INVERTED THRU BOARD INTERCONNECTS



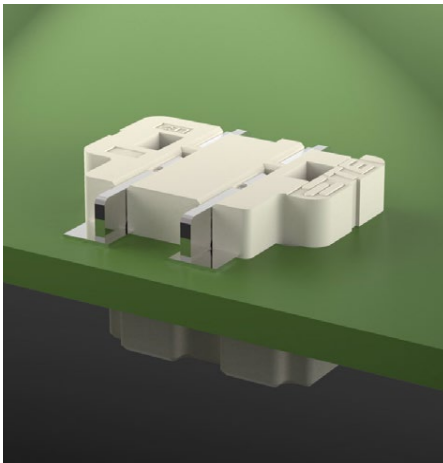
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HIGH POWER INVERTED THRU
BOARD SMT CONNECTOR



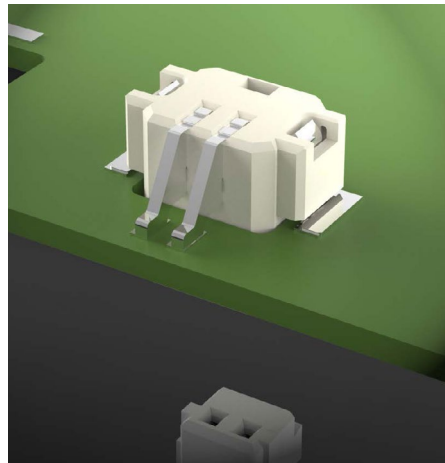
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INVERTED THRU BOARD CARD
EDGE AND POKE-IN CONNECTOR



Page Number 05

ITB CARD EDGE CONNECTOR



Page Number 06

INVERTED THRU BOARD SMT
CONNECTOR

HIGH POWER INVERTED THRU BOARD SMT CONNECTOR

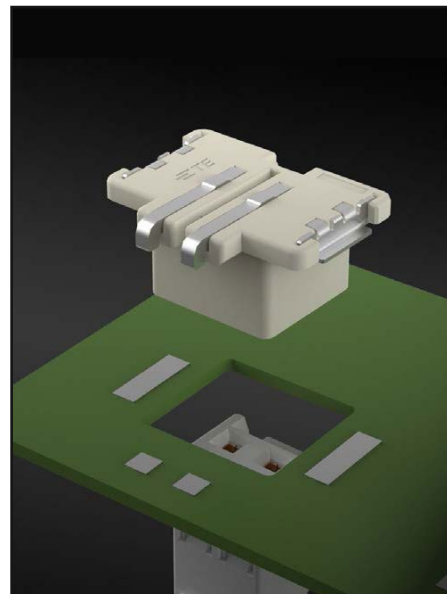
The High Power Inverted Thru Board SMT Connector is a 7 A, 600 VAC rated inverted header that is an excellent for bringing power to today's high-output FR4, and aluminum clad circuit board LED assemblies. The mating Economy Power II (EPII) Connector works with 22-18 AWG (0.34mm² - 0.75mm²) stranded wire sizes leveraging the reliable EP II connector system.

PRODUCT BENEFITS

- Low profile top surface height of 2mm above the LED printed circuit board helps minimize interference with LED light emission
- EP II connector provides positive latching to help ensure a fully mated connection

PRODUCT OFFERING

Part Number	Description
2154829-1	2 position connector
2154829-2	3 position connector
2154829-3	4 position connector
2154828-1	2 position cable assembly
2154828-2	3 position cable assembly
2154828-3	4 position cable assembly



Product Brochure: [5-17737700-9](#)

INVERTED THRU BOARD CARD EDGE AND POKE-IN CONNECTOR

The Inverted Thru Board Card Edge and Poke-In Connectors are two-position, one piece connectors that share the same printed circuit board (PCB) footprint while offering flexibility in providing either a direct card edge mating solution or a poke-in wire connection to the underside of the LED array boards. Both provide 3.0mm creep and clearance from all other conductive components on FR4 and metal clad printed circuit boards making them suitable for higher voltage designs.

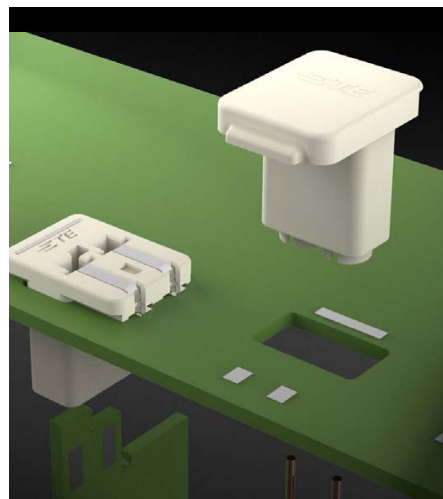
PRODUCT BENEFITS

Inverted Thru Board Card Edge Connectors

- Offered in two versions to accept 1.0mm to 1.6mm thick mating PCBs
- Polarizing keying retention feature option available to provide additional extraction force
- Accepts mating driver PCB geometry variations to provide flexibility in the end application design

Inverted Thru Board Poke-In Connectors

- Accommodates a broad range of wires from 18 to 22 AWG or 24 to 26 AWG
- The connectors have an additional 1mm in depth to accommodate the wire insulation guide barrels on the bottom



PRODUCT OFFERING

Part Number	Description
2213188-1	For 1.0mm PCB
2213188-2	For 1.6mm PCB
2213188-3	For 1.0mm PCB, with cover
2213188-4	For 1.6mm PCB, with cover
2213189-1	For 22-18 AWG wire
2213189-2	For 26-24 AWG wire
2213189-3	For 22-18 AWG wire, with cover
2213189-4	For 26-24 AWG wire, with cover

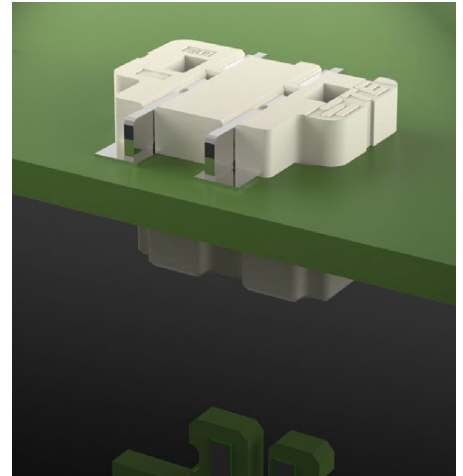
Product Brochure: [1-1773721-1](#)

ITB CARD EDGE CONNECTOR

The ITB (Inverted Thru-Board) Card Edge Connector is designed to provide direct power connection between driver boards to the underside of LED array boards. This 2 position, SMT card edge connector provides a perpendicular mating, cable-less, space saving power connection that is highly reliable for compact LED assembly designs such as those found in today's retrofit lamps & bulbs.

PRODUCT BENEFITS

- One piece mating solution for faster and easier assembly operation
- Low profile space saving design
- The 1.5mm height above the PCB minimizes LED light obstruction
- The product accepts printed circuit board in 1.0mm and 1.2mm thicknesses to meet your PCB design requirements



PRODUCT OFFERING

Part Number	Description
1-1971748-1	For 1.0mm thick circuit boards
1971748-2	For 1.2mm thick circuit boards

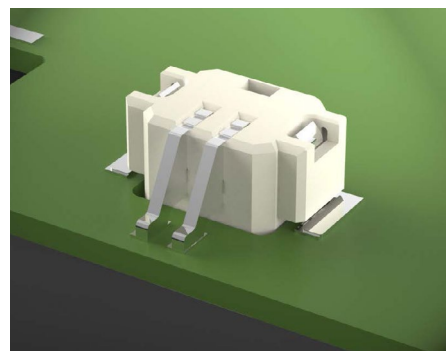
Product Brochure: [4-1773464-9](#)

INVERTED THRU BOARD SMT CONNECTOR

The Inverted Thru Board SMT Connector provides a small form factor solution to bring power into a conventional or aluminum-clad printed circuit board from the underside of the board. This helps eliminate the challenges of dressing wires on the top side of LED boards resulting in low profile, less obstructed PCB layout designs. The header mates with the 1.5mm centerline AMP Mini CT cable assembly and facilitates a simpler assembly of solid state LED lighting for architectural, residential and commercial applications.

PRODUCT BENEFITS

- Helps eliminate wire dress management issues on the top surface of the LED PCB minimizing light obstruction
- Available in 2 thru 6 positions to address lighting power and control applications
- Accepts 2 thru 6 AMP Mini CT cable assemblies allowing design flexibility



PRODUCT OFFERING

Part Number	Description
2106091-1	2 position connector
2106091-2	3 position connector
2106091-3	4 position connector
2106091-4	5 position connector
2106091-5	6 position connector
2058943-1	2 position AMP Mini CT cable assembly
2058943-2	3 position AMP Mini CT cable assembly
2058943-3	4 position AMP Mini CT cable assembly
2058943-4	5 position AMP Mini CT cable assembly
2058943-5	6 position AMP Mini CT cable assembly

Product Brochure: [7-1773453-0](#)

About TE Connectivity

TE Connectivity plc (NYSE: TEL) is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions enable the distribution of power, signal and data to advance next-generation transportation, energy networks, automated factories, data centers, medical technology and more. With more than 85,000 employees, including 9,000 engineers, working alongside customers in approximately 130 countries, TE ensures that EVERY CONNECTION COUNTS. Learn more at www.te.com and on [LinkedIn](#), [Facebook](#), [WeChat](#) and [Instagram](#).

Connect With Us

We make it easy to connect with our experts and are ready to provide all the support you need. Visit te.com/support to chat with a Product Information Specialist.

te.com/inverted-thru-board-connectors

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