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## **Datasheet for 76650-0191**

**General Information** 

Kit Part Number:

76650-0191

Connector Type: I/O, I/O Wire-to-Board

Solution: I/O Connectors

Molex Family: TDP® Triad®

Certificates: N/A

Country of Origin: Kit assembled in U.S.A

**Specifications** 

Circuit Size: 18, 48
Current Rating: 1.5A

Mounting Style: SMT (Surface Mount Technology)

Orientation: Right Angle Receptacles, Vertical Plugs

Pitch: 1.27mm (.050")

**Speed:** 5 Gbps (Gigabits per second)

Voltage Rating: 40V

#### **Product Hightlights**

The innovative TDP® (Triad Differential Pair) family uses a "triad" design of differential signal and ground lines to achieve bandwidths up to 5.0Gbps and beyond. The shielded, dual row, cable-to-board interface offers high speed and controlled impedance. It is comprised of a fully shielded receptacle and plug to provide maximum EMI/RFI protection. The inline SMT receptacle optimizes PCB routing and the low 7.67mm (.301") profile makes TDP an excellent choice where height considerations are a factor. TDP® utilizes a high-cycle-life (5000 cycles min.) Low Force Helix™ (LFH) contact design, providing long term performance and reliability. The recessed contacts protect signal lines from ESD, support mating alignment and provide added contact protection during operator handling. The TDP® family is available in 18, 28 and 48 circuits. TDP® cable plugs feature jackscrews for mating retention.

#### Features and Benefits

- The shieded, dual row interface offers highspeed and 100-ohm controlled impedance with data rates up to 5 Gbs
- Inline SMT leads on 0.64mm (.025") pitch provide direct PCB routing
- High cycle LFH™ shrouded contact system provides 2 points of contact for optimal signal integrity
- Jackposts with 4-40 threads for use with jackscrews for positive mating retention
- First-mate/last-break pins 9 and 10 prevent damage when "hot plug" mating
- LFH™ contact design provides shallow mating angle, reducing insertion forces
- Terminates to (24-32)AWG wire through soldering or resistance welding
- Contains 2-piece diecast shell and two jackscrews for TDP Cable Plug Connector
- Lead-free process compatible, meets future manufacturing requirements
- 5,000 mating cycles with 15μ" Gold (Au), high reliability
- 1.5A continuous current per pin, allows for higher power throughput

#### **Applications**

- High Resolution Cameras
- · Audio, Video Editing and Storage
- Printers
- Medical Devices



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- LVDS Servers
- Routers
- Switches
- Storage Devices
- Multiple High-Speed, Differential-Pair Signal Applications
- Military Data Communications and Video Equipment (cots)



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Bill of Materials		
Molex Part No.	Description	Quantity
74960-3018	1.27mm (.050") Pitch TDP® Triad Differential Pair SMT Right Angle Receptacle, China RoHS, Lead-Free, 18 Circuits	1
74960-3048	1.27mm (.050") Pitch TDP® Triad Differential Pair SMT Right Angle Receptacle, China RoHS, Lead-Free, 48 Circuits	1
75000-1018	1.27mm (.050") Pitch TDP® Triad Differential Pair Plug Assembly, China RoHS, Lead-Free, 18 Circuits	1
75000-1048	1.27mm (.050") Pitch TDP® Triad Differential Pair Plug Assembly, China RoHS, Lead-Free, 48 Circuits	1
75115-0018	1.27mm (.050") Pitch TDP® Triad Differential Pair Die Cast Backshell, China 50 (Pb), 18 Circuits	1
75115-0048	1.27mm (.050") Pitch TDP® Triad Differential Pair Die Cast Backshell, China 50 (Pb), 48 Circuits	1
74962-0001	TDP® 3/16" Hex Jackpost (4-40 UNC-2B), China 50 (Pb)	4

### **Recommended Molex Tool**

Molex Part No.

Descripition