

## Datasheet for 76650-0191

### General Information

<b>Part Number:</b>	76650-0191
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	TDP Connector Kit
<b>Description:</b>	SMT Right Angle Plug and Receptacle and Backshell Assemblies
<b>Product Family:</b>	TDP®
<b>Certificates:</b>	(Molex Parts within this kit) - EU RoHS Compliant, UL and CSA
<b>Country of Origin:</b>	Kit assembled in U.S.A.

### Specifications

#### Design

<b>Configuration:</b>	Wire-to-Board
<b>Pitch:</b>	1.27mm (.050")
<b>Connector Type:</b>	Receptacles and Plugs
<b>Mounting</b>	
<b>Orientation:</b>	Right Angle
<b>Circuit Sizes:</b>	18 and 48
<b>Current Rating:</b>	1.5 Amps (per circuit)
<b>Voltage:</b>	40 VoltsAC(RMS)

### Product Highlights

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.

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Features and Benefits	Applications
<ul style="list-style-type: none"> <li>• The shielded, dual row interface offers high-speed and 100-ohm controlled impedance with data rates up to 5 Gbs</li> <li>• Inline SMT leads on 0.64mm (.025") pitch provide direct PCB routing</li> <li>• High cycle LFH™ shrouded contact system provides 2 points of contact for optimal signal integrity</li> <li>• Jackposts with 4-40 threads for use with jackscrews for positive mating retention</li> <li>• First-mate/last-break pins 9 and 10 prevent damage when "hot plug" mating</li> <li>• LFH™ contact design provides shallow mating angle, reducing insertion forces</li> <li>• Terminates to (24-32)AWG wire through soldering or resistance welding</li> <li>• Contains 2-piece diecast shell and two jackscrews for TDP Cable Plug Connector</li> <li>• Lead-free process compatible, meets future manufacturing requirements</li> <li>• 5,000 mating cycles with 15µ" Gold (Au), high reliability</li> <li>• 1.5A continuous current per pin, allows for higher power throughput</li> </ul>	<ul style="list-style-type: none"> <li>• High Resolution Cameras</li> <li>• Audio, Video Editing and Storage</li> <li>• Printers</li> <li>• Medical Devices</li> <li>• LVDS Servers</li> <li>• Routers</li> <li>• Switches</li> <li>• Storage Devices</li> <li>• Multiple High-Speed, Differential-Pair Signal Applications</li> <li>• Military Data Communications and Video Equipment (cots)</li> </ul>

### Bill of Materials for Part No. 76650-0191

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

### No Recommended Molex Tool for Part No. 76650-0191

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