

3M Introduces Compact Mini-Clamp Connectors for Demanding Applications

3M Electronic Solutions Division recently extended the Mini-Clamp Connector product line to include Right Angle Surfacemount Socket connectors. Designed for a reliable interconnection in demanding applications, the newest addition to the 3M Mini-Clamp Connector family features a compact, low-profile design that retains the reliable dual-wipe, high-mating cycles and positive mating latches of its predecessors.

The new Right Angle Surfacemount Socket connectors are available in 3- and 4-pins, and include three options for properly placing and locating the component on a PC board, as well as a robust PC board retention tab feature.

Like the Mini-Clamp II connectors from 3M introduced earlier this year, the newest addition is designed to provide a reliable electrical connection between sensors, actuators, drives and control units without special tooling or wire preparation. The 3M insulation displacement contact (IDC) provides a simple installation process without material debris or waste.

The Mini-Clamp connectors are part of 3M's field bus system offering, designed to reduce the amount of wire usage while saving space in factory automation installations. These connectors provide an easy and simple wire termination process which helps reduce the total overall cost of wiring installations. The Mini-Clamp connector system's unique IDC wire termination method requires only the use of standard pliers, making the process inexpensive, simple and easy to complete in the field.

Typical applications and industries for these discrete connectors include semiconductor and LCD manufacturing machines; medical, packaging systems, conveyor systems, elevators and lift systems; flowmeters; motion test and measurement systems; traffic light and control systems; LED lighting, signage, gaming base press control electronics; food and packaging industries; automotive and metal industries, and sensors.

Mini-Clamp Connectors by 3M are available in 2 mm pitch that use color coding (red, yellow, orange, green, blue and gray) to provide for the proper wire usage, wire alignment and retention in the cover. The 3M Mini-Clamp Connectors are available in 3- and 4-pin wiremount configurations in socket, panelmount socket, and plug versions. It is also available in boardmount socket configurations: a 3- and 4-pin single row socket connectors; a 6- and 8-pin dual row socket connectors; and a 6-pin (2 x 3 pins), a 8-pin (2 x 4 pins), a 12-pin (4 x 3 pins) and a 16-pin (4 x 4 pins) multi-row socket connector. Dust caps are available for more harsh and dusty environments.

Learn more about this product family and other 3M interconnect solutions at <http://www.3M.com/interconnects>.

About 3M Electronic Solutions Division

3M Electronics Solutions Division offers innovative solutions to the electronics market, such as static control products; copper interconnect systems; cables and cable assemblies; carrier and cover tapes and trays; flexible circuits; embedded capacitor materials; and Textool brand test and burn-in sockets.

About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. 3M's core strength is applying its more than 40 distinct technology platforms – often in combination – to a wide array of customer needs. With \$24 billion in sales, 3M employs 79,000 people worldwide and has operations in more than 60 countries. For more information, visit www.3M.com.

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