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650-V SJ MOSFETs Come In TOLL Package With Kelvin Source

[Magnachip Semiconductor's](#) 99-m Ω MMTB65R099RFRH and 130-m Ω MMTB65R130RFRH are 650-V superjunction (SJ) MOSFETs offered in the TO-Leadless (TOLL) package. These devices feature a four-pin Kelvin configuration, which minimizes the effects of parasitic inductance on the gate-source return path, thereby improving switching stability and overall power efficiency by reducing gate oscillation (ringing).

These MOSFETs are designed to meet the high-power and high-current requirements of premium consumer electronics such as premium TVs, gaming monitors, AI laptop adaptors, and chargers.

As compared to a conventional D²PAK package, the four-pin TOLL package delivers more than a 100% increase in current capability, a 24% reduction in footprint and a 48% reduction in height. Therefore, the four-pin TOLL package is suitable for smaller PCB and high-power density applications, which demand high power efficiency and effective heat dissipation performance.

For more information, see the SJ MOSFETs 650-V product [page](#).

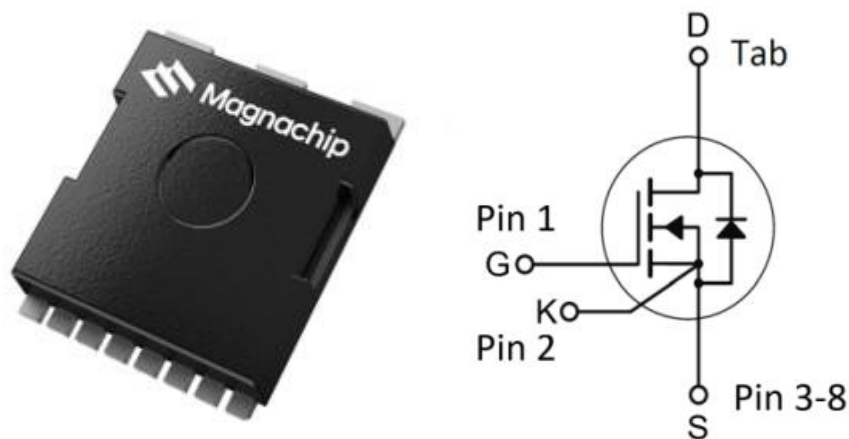


Figure. Hyuk Woo, CTO of Magnachip, commented, "Our new 650-V SJ MOSFET TOLL products are designed to meet both PCB space-saving and high-performance requirements of slim form-factor applications. Magnachip will continue to expand its 600-V TOLL package product lineup in the near future to support new-generation products for AI datacenters and high-power applications."