



150 V, 5.6 mΩ SiRS5700DP MOSFET in PowerPAK® SO-8S Increases Efficiency With Industry-Low $R_{DS(ON)}$ and $R_{DS(ON)} * Q_g$ FOM

FEATURES

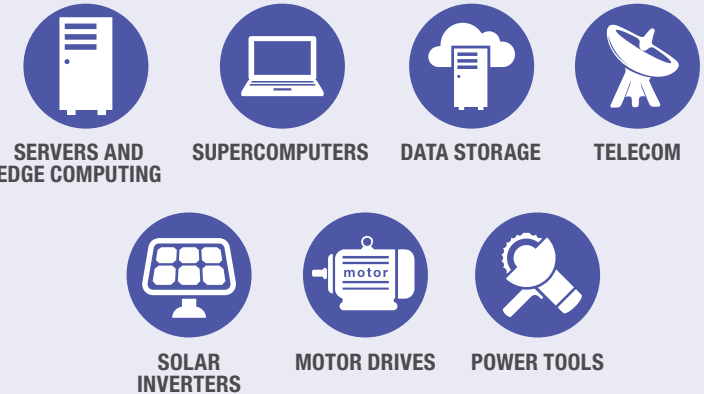
- Typical $R_{DS(ON)} = 4.6 \text{ m}\Omega$
- Industry's lowest $R_{DS(ON)} * Q_g$ FOM
- Complies with IPC-9701 criteria for more reliable temperature cycling
- Standard 6 mm by 5 mm footprint is fully compatible with the PowerPAK® SO-8 package
- Available in PowerPAK® SO-8S (QFN 6x5) package
 - Offers extremely low $0.45 \text{ }^\circ\text{C/W}$ $R_{th(JC)}$, enabling continuous drain current up to 144 A to increase power density, while providing robust SOA capability



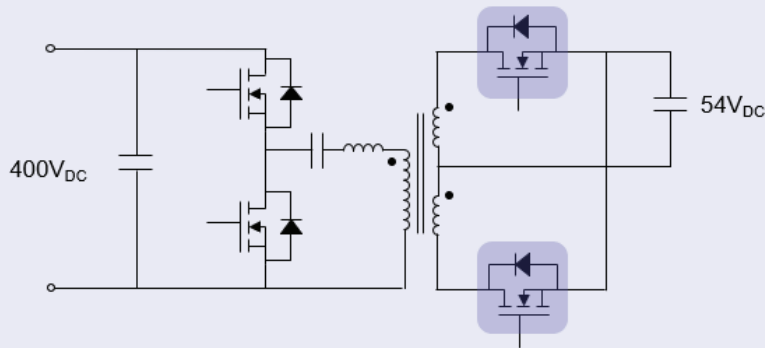
CIRCUIT APPLICATIONS

- Synchronous rectification
- DC/DC converters
- Battery management systems
- Power supplies

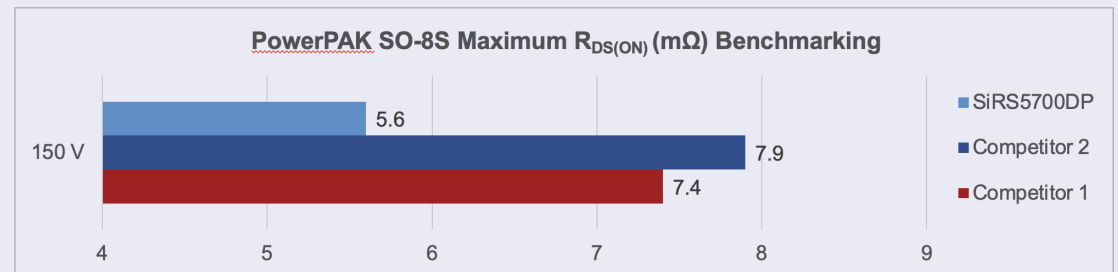
END PRODUCTS



TYPICAL CIRCUIT DIAGRAM



SiRS5700DP for the 54 V_{OUT} secondary side of an LLC resonant converter with a central tap transformer.



Compared to the nearest competitors, the SiRS5700DP offers the industry's lowest $R_{DS(ON)}$ — with an improvement of at least 24.3 % — which is ideal for next-generation power supply requirements, such as 6 kW AI server power systems.