



600 V CoolMOS™ C7

A stepping stone to GaN



Infineon's new 600 V CoolMOS™ C7 MOSFET series performs like GaN and brings new levels of efficiency to hard switching topologies (PFC/TTF), unlike its 650 V predecessor also in high performance resonant topologies (LLC). 600 V CoolMOS™ C7 is the perfect solution for applications that are driven by efficiency and total cost of ownership (TCO). Furthermore you can save costs up to 30% on your material costs (copper windings and core material) by doubling the switching frequency with 600 V CoolMOS™ C7.

Key features

- › Reduced switching loss parameters such as Q_g , C_{oss} , enabling higher switching frequency
- › 50% E_{oss} reduction compared to older CP technology and close to GaN
- › Lowest $R_{DS(on)}$ * A in the world ($<1 \Omega \cdot mm^2$)
- › Improved body diode and low Q_{oss}

Key benefits

- › Doubling the switching frequency will reduce the size & cost of magnetic components (e.g. 65 kHz - 130 kHz)
- › Increased efficiency in PFC and TTF topologies
- › Smaller packages for same $R_{DS(on)}$ lead to power density benefits
- › Suitable for high-end resonant topologies such as LLC



For further information please visit our website:
www.infineon.com/600V-C7

