



Selection Guide

CoolMOS™ product offerings in DPAK

Including new best-in-class $R_{DS(on)}$ offerings

Infineon Technologies introduces the new product offerings in DPAK (TO-252) package, including new lowest $R_{DS(on)}$ parts.

Key features

- › Wide variety of products to suite a variety of end applications
- › Best-in-class $R_{DS(on)}$ in 600, 650, 800 and 950 V technologies
- › Industrial and standard grade options available
- › Larger capacity
- › Standard footprint
- › SMD package

DPAK package information

Outline	Footprint*	Engineering drawing*	Packaging*

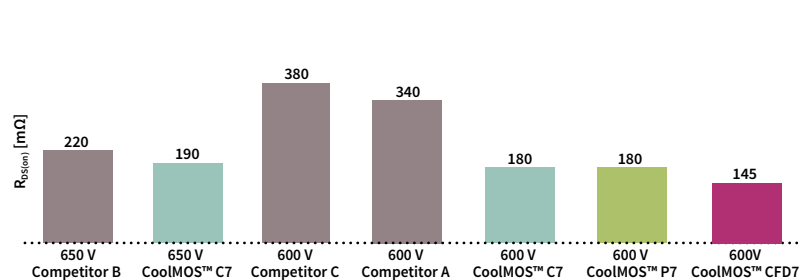
*All measurements in mm

Key benefits

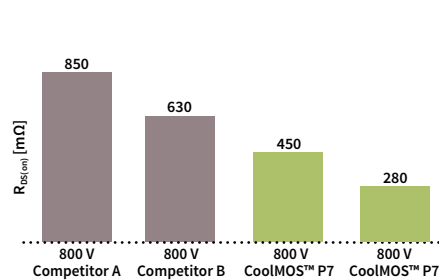
- › Large portfolios suited for flyback, PFC and LLC topologies
- › Improved power density
- › Suited for consumer, lighting and a variety of industrial applications
- › Easily meet high volume opportunities
- › Drop-in replacement footprint, makes PCB layout easy
- › Simplified mounting process for surface mount packages, leads to cost improvements in production

Overview of lowest DPAK $R_{DS(on)}$

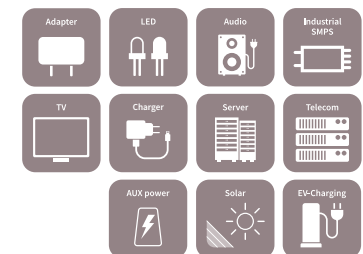
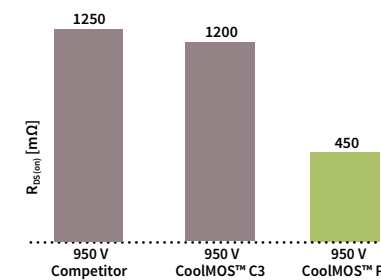
600 V and 650 V superjunction MOSFET



800 V superjunction MOSFET



950 V superjunction MOSFET



Best-in-class $R_{DS(on)}$ comparison for 600 V and 650 V

- > 600 V has a 47 percent lower $R_{DS(on)}$ than competition in DPAK with 180 m Ω parts
- > 650 V has a 14 percent lower $R_{DS(on)}$ than competition in DPAK with 190 m Ω parts
- > 600 V CFD7 has a 51 percent lower $R_{DS(on)}$ than competition in DPAK with 145 m Ω parts

Best-in-class $R_{DS(on)}$ comparison for 800 V

- > 800 V has a 56 percent lower $R_{DS(on)}$ than competition in DPAK with 280 m Ω parts

Best-in-class $R_{DS(on)}$ comparison for 950 V

- > 950 V has 65 percent lower $R_{DS(on)}$ than competition in DPAK with 450 m Ω parts

DPAK product availability according to on-state resistance ($R_{DS(on)}$), voltage class and CoolMOS™ series

Voltage [V]	Series	$R_{DS(on)}$ group [m Ω]						
		145-199	200-299	300-400	401-600	601-899	900-1500	>1500
500	CE		IPD50R280CE*	IPD50R380CE*	IPD50R500CE*	IPD50R650CE / IPD50R800CE*	IPD50R950CE / IPD50R1K4CE*	IPD50R2K0CE / IPD50R3K0CE*
600	C7	IPD60R180C7						
	CE			IPD60R400CE*	IPD60R460CE*	IPD60R650CE / IPD60R800CE*	IPD60R1K0CE / IPD60R1K5CE*	IPD60R2K1CE / IPD60R3K4CE*
	P7	IPD60R180P7		IPD60R360P7	IPD60R600P7			
	CFD7	IPD60R145CFD7	IPD60R210CFD7	IPD60R360CFD7				
		IPD60R170CFD7	IPD60R280CFD7					
650	C7	IPD65R190C7	IPD65R225C7					
	CE			IPD65R400CE*		IPD65R650CE*	IPD65R1K0CE / IPD65R1K5CE*	
700	CE				IPD70R600CE*		IPD70R950CE / IPD70R1K4CE*	IPD70R2K0CE*
	P7			IPD70R360P7S*	IPD70R600P7S*		IPD70R900P7S* / IPD70R1K4P7S*	
800	CE						IPD80R1K0CE / IPD80R1K4CE*	IPD80R2K8CE*
	P7		IPD80R280P7		IPD80R450P7		IPD80R1K4P7	IPD80R4K5P7
950	P7				IPD95R450P7	IPD95R750P7	IPD95R1K2P7	IPD95R2K0P7

ACTIVE & PREFERRED

BEST-IN-CLASS

*Standard grade

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