



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.

DPAK package information

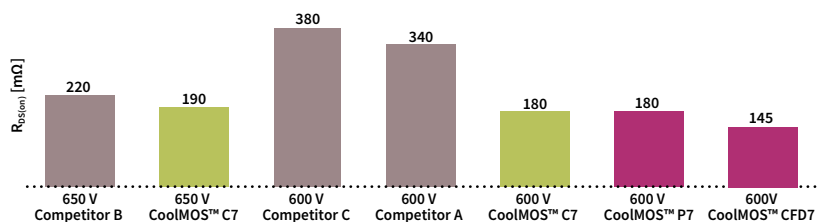
Outline	Footprint*	Engineering drawing*	Packaging*

*All measurements in mm

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

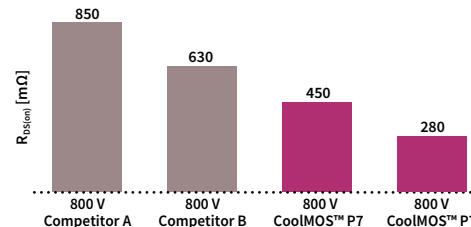
Overview of lowest DPAK $R_{DS(on)}$ for 600 V and 650 V superjunction MOSFET



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 mΩ parts

Overview of lowest DPAK $R_{DS(on)}$ for 800 V superjunction MOSFET

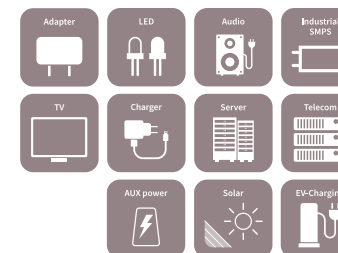


Key features

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

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



CoolMOS™ product offerings in DPAK

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



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

Voltage [V]	Series	$R_{DS(on)}$ group [mΩ]						
		145-199	200-299	300-400	401-600	601-899	900-1500	>1500
500	CE		IPD50R280CE*	IPD50R380CE*	IPD50R500CE*	IPD50R650CE / IPD50R800CE*	IPD50R950CE / IPD50R1K4CE*	IPD50R2K0CE / IPD50R3K0CE*
	C3				SPD08N50C3		SPD04N50C3 / SPD03N50C3	SPD02N50C3
	CP			IPD50R399CP	IPD50R520CP			
600	C6			IPD60R380C6	IPD60R520C6 / IPD60R600C6		IPD60R950C6 / IPD60R1K4C6	IPD60R2K0C6 / IPD60R3K3C6
	C7	IPD60R180C7						
	CE			IPD60R400CE*	IPD60R460CE*	IPD60R650CE / IPD60R800CE*	IPD60R1K0CE / IPD60R1K5CE*	IPD60R2K1CE / IPD60R3K4CE*
	E6			IPD60R380E6	IPD60R450E6 / IPD60R520E6 / IPD60R600E6	IPD60R750E6		
	P6			IPD60R380P6	IPD60R600P6			
	C3				SPD07N60C3	SPD06N60C3	SPD04N60C3 / SPD03N60C3	SPD02N60C3 / SPD01N60C3
	CP			IPD60R385CP				
	P7	IPD60R180P7		IPD60R360P7 ¹⁾	IPD60R600P7 ¹⁾			
	CFD7	IPD60R145CFD7	IPD60R210CFD7 ¹⁾	IPD60R360CFD7 ¹⁾				
		IPD60R170CFD7	IPD60R280CFD7					
650	C6		IPD65R250C6	IPD65R380C6	IPD65R600C6		IPD65R950C6 / IPD65R1K4C6	
	C7	IPD65R190C7	IPD65R225C7					
	CE			IPD65R400CE*		IPD65R650CE*	IPD65R1K0CE / IPD65R1K5CE*	
	CFD2				IPD65R420CFD	IPD65R660CFD	IPD65R950CFD / IPD65R1K4CFD	
	E6		IPD65R250E6	IPD65R380E6	IPD65R600E6			
700	CE				IPD70R600CE*		IPD70R950CE / IPD70R1K4CE*	IPD70R2K0CE*
	P7			IPD70R360P7S ^{*1)}	IPD70R600P7S ^{*1)}		IPD70R900P7S ^{*1)} / IPD70R1K4P7S ^{*1)}	
800	C3						SPD06N80C3 / SPD04N80C3	SPD02N80C3
	CE						IPD80R1K0CE / IPD80R1K4CE*	IPD80R2K8CE*
900	P7		IPD80R280P7		IPD80R450P7		IPD80R1K4P7	IPD80R4K5P7
	C3						IPD90R1K2C3	

ACTIVE & PREFERRED

ACTIVE

BEST-IN-CLASS

*Standard grade

¹⁾Coming soon

Published by
Infineon Technologies Austria AG
9500 Villach, Austria

© 2017 Infineon Technologies AG.
All Rights Reserved.

Order Number: B116-I0365-V2-7600-EU-EC-P
Date: 10/2017

Please note!

THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THEIR TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.