



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

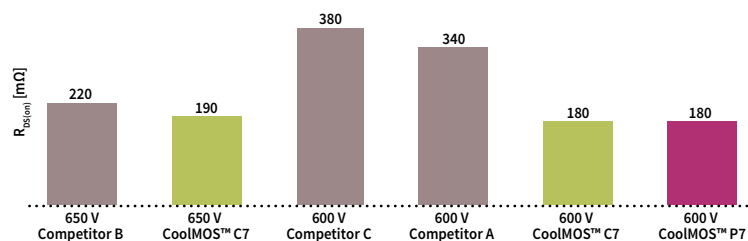
Outline	Footprint*	Engineering drawing*	Packaging*
<p>P-TO252-3-1</p>		<p>All metal surfaces tin plated, except area of cut.</p>	<p>CMTG9092</p>

*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

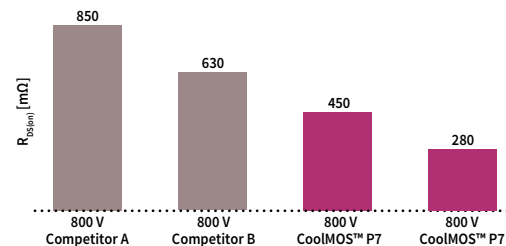
Overview of lowest DPAK $R_{DS(on)}$ for 600 V and 650 V superjunction MOSFET



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

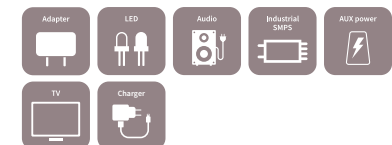


Key features

- > 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



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

Voltage [V]	Series	$R_{DS(on)}$ group [mΩ]						
		150-199	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 ¹⁾		IPD60R360P7 ¹⁾	IPD60R600P7 ¹⁾			
	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

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