



800V CoolMOS™ C3

Highly Efficient Products with Best-in-Class $R_{DS(on)}$ /Package

800V CoolMOS™ C3 is Infineon's high performance device family offering 800V break down voltage. The low $R_{DS(on)}$ enables reduced conduction losses and improved efficiency. 800V CoolMOS™ C3 series is designed according to the revolutionary superjunction (SJ) principle. With the 800V CoolMOS™ C3 family, Infineon combines long experience as the leading SJ MOSFET supplier with best-in-class innovation. The resulting 800V devices provide all benefits of a fast switching SJ MOSFET while not sacrificing ease of use.

800V CoolMOS™ C3 achieves extremely low conduction and switching losses and can make switching applications more efficient, more compact, lighter and cooler. Moreover, this series offers an outstanding cost/performance ratio. The 800V CoolMOS™ C3 products have been optimized for ease of use and efficiency in applications such as Solar Inverters, Industrial Inverters, PC Silverbox, Adapter, LCD TV and Lighting.

Key Features

- Low specific on-state resistance ($R_{DS(on)} * A$)
- Very low energy storage in output capacitance (E_{oss}) @ 400V
- Low gate charge (Q_g)

Key Benefits

- High efficiency and power density
- Outstanding cost/performance
- High reliability
- Ease of use

Applications

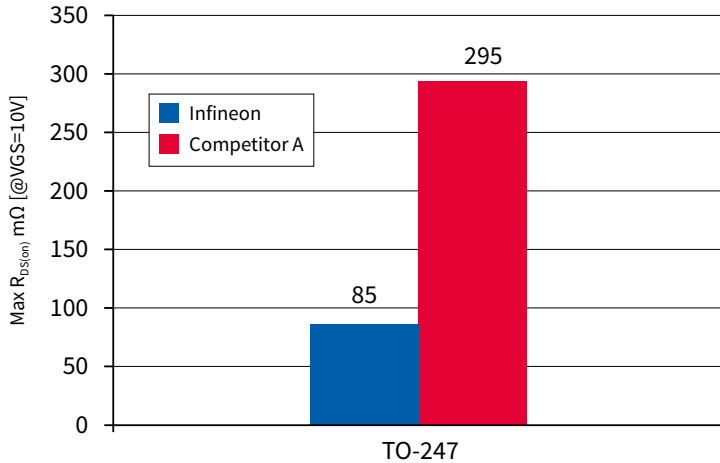
- SEPIC topology in PFC preconverter, e.g. Lighting
- PWM stages for Solar Inverters, Industrial Inverters, 3-phase topologies, PC Silverbox, Adapter, LCD TV and Lighting



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800V CoolMOS™ C3 - lowest resistance/package available on the market



Infineon's new CoolMOS™ best-in-class TO-247 part has more than 71% lower $R_{DS(on)}$ than the nearest competitor

800V CoolMOS™ C3 Product Portfolio

$R_{DS(on)}$ [mΩ]	TO-220	TO-220 FullPAK	TO-247	DPAK TO-252		I ² PAK TO-262	D ² PAK TO-263
	Halogen-Free	Halogen-Free	Halogen-Free		Halogen-Free	Halogen-Free	Halogen-Free
2700	SPP02N80C3	SPA02N80C3		SPD02N80C3	SPD02N80C3		
1300	SPP04N80C3	SPA04N80C3		SPD04N80C3	SPD04N80C3		
900	SPP06N80C3	SPA06N80C3		SPD06N80C3	SPD06N80C3		
650	SPP08N80C3	SPA08N80C3				SPI08N80C3	
450	SPP11N80C3	SPA11N80C3	SPW11N80C3				
290	SPP17N80C3	SPA17N80C3	SPW17N80C3				SPB17N80C3
85			SPW55N80C3				

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