



CoolMOS™ CE – lighting applications

Good efficiency, ease-of-use and EMI performance at an attractive cost position make the CoolMOS™ CE series the product of choice for LED drivers or LED tubes in buck, flyback, PFC and LLC topology. Its benefits include an improvement in efficiency and thermal behavior compared to standard MOSFETs.

CoolMOS™ products aimed at lighting bring the benefits of highest quality and delivery reliability as outlined in the overview section for the CoolMOS™ portfolio. However, the CoolMOS™ CE series has been defined with a particular focus on the customers' needs, for an attractive price and fastest supply availability.

CoolMOS™ CE in SOT-223 package

With the rapid conversion from CFL to LED lighting, customer requirements are rapidly changing: On the one hand, power levels are further decreasing, while on the other hand, increasing cost pressure compels power designers to optimize designs to a fraction of a cent. The completion of the CoolMOS™ CE portfolio with the SOT-223 package is Infineon's answer to this challenge: It facilitates a further reduction in BOM cost – and additional footprint optimization in some designs – with only a minor compromise in terms of thermal behavior.

Part Number	Voltage class [V]	Package	General proposal
IPA50R190CE	500	SOT-223	Lighting
IPN50R3K0CE			Lighting
IPN50R2K0CE			Lighting
IPN50R1K4CE			Lighting
IPN50R950CE			Lighting
IPN50R800CE			Lighting
IPN50R650CE			Lighting
IPN60R3K4CE	600		Lighting
IPN60R2K1CE			Lighting
IPN60R1K5CE			Lighting
IPN60R1K0CE			Lighting
IPN65R1K5CE	650		Lighting
IPN70R1K5CE	700		Lighting
IPN70R1K0CE			Lighting

SOT-223 as a drop-in replacement for DPAK at a lower cost

The SOT-223 package with a decapped middle pin is fully compatible with the footprint of a DPAK, therefore allowing one-on-one drop-in replacements and second sourcing.

