



Product Brief

700 V CoolMOS™ P7 and 700 V CoolMOS™ CE in IPAK Short Lead with ISO Standoff package Solution for higher assembly yield in charger applications

The IPAK Short Lead (SL) with ISO Standoff package in combination with CoolMOS™ CE was introduced in 2016 to address assembly challenges in charger applications. Now, Infineon is enabling its customers to also enjoy the benefits of its latest superjunction MOSFET technology, the CoolMOS™ P7, in combination with this package solution. CoolMOS™ P7 is designed for competitiveness in the low power SMPS market, by offering an excellent price/performance ratio and ease-of-use, making it a perfect fit for its target applications.

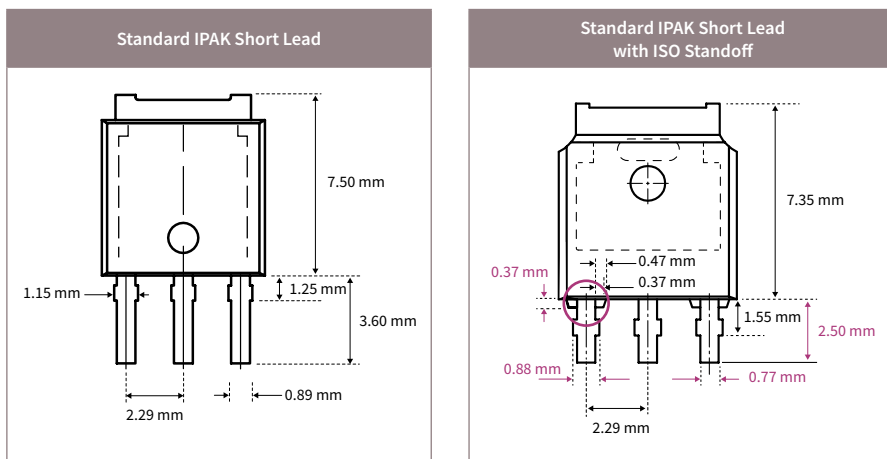
IPAK SL is the preferred package in charger applications as it can be fully inserted into the PCB during assembly, which helps to meet charger height requirements. However, this often leaves residues between the package body and PCB region after the post-assembly cleaning. These residues cause yield losses and thus need to be addressed with additional process steps and increasing cost.

Key features

- > Mold component feature between package body and leads
- > Well-defined standoff height
- > Optimized leg width and length

Key benefits

- > More effective cleaning in terms of residue removing, resulting in better assembly yield
- > Larger effective creepage distance between legs
- > More suitable for charger applications



The Infineon IPAK SL with ISO Standoff package offers a well-defined mold feature at the bottom of the package body: it allows to fully insert the MOSFET into the PCB while still having a well-defined isolation distance of 0.37 mm (maximum value) between PCB and package body. This way, the residues between package and PCB can be effectively removed after cleaning, which improves yield and reduces cost. This feature also helps to increase the effective creepage distance between the legs. In addition, the optimized leg width and length make this package more suitable for charger applications.

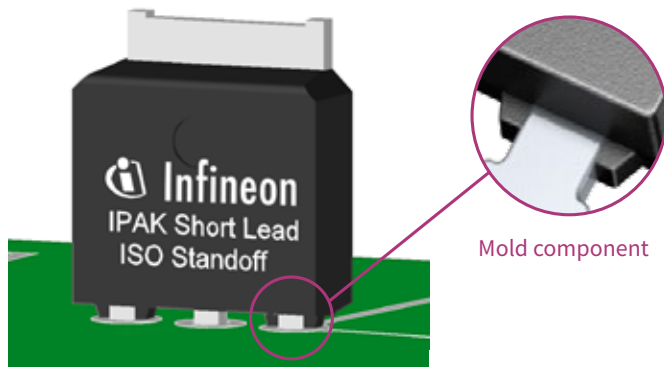
www.infineon.com/p7

www.infineon.com/ce

www.infineon.com/ipak-sl-isostandoff



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Visualization of IPAK SL with ISO Standoff package fully inserted into PCB. The mold features at the bottom of the package make sure that the package can be fully inserted into the PCB while maintaining a well-defined distance between PCB and package body. This way, no residues are left in assembly after soldering and cleaning.

Product portfolio

R _{DS(on)} [mΩ]	Standard grade	
	700 V CoolMOS™ P7	700 V CoolMOS™ CE
2000	IPSA70R2K0P7S	IPSA70R2K0CE
1400	IPSA70R1K4P7S	IPSA70R1K4CE
1200	IPSA70R1K2P7S	
950		IPSA70R950CE
900	IPSA70R900P7S	
750	IPSA70R750P7S	
600	IPSA70R600P7S	IPSA70R600CE
450	IPSA70R450P7S	
360	IPSA70R360P7S	

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