

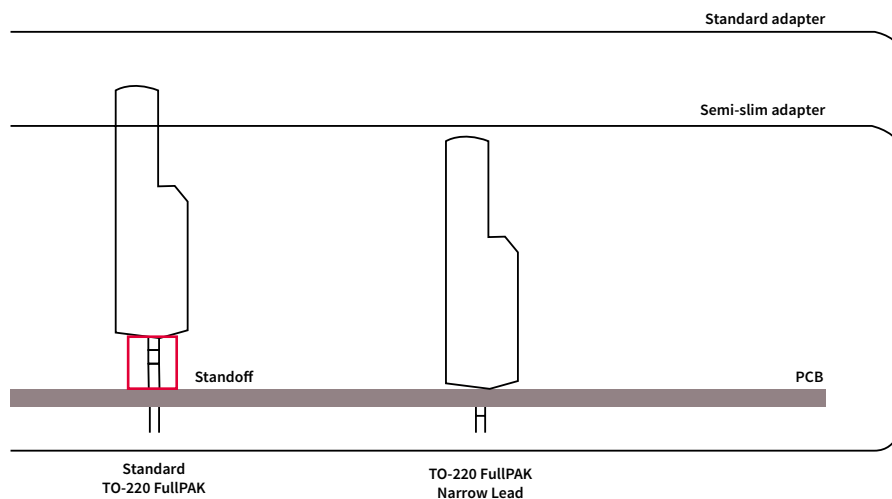


Product brief

CoolMOS™ P7 and CE SJ MOSFET in TO-220 FullPAK Narrow Lead package

Solution for height reduction in adapter and charger applications

The TO-220 FullPAK Narrow Lead package, available with P7 and CE, fully addresses the customer needs with regard to height reduction requirements in adapter and charger applications.



Key features

- > 24 percent reduction in standoff width
- > 44 percent reduction in standoff height
- > 23 percent reduction in leg width

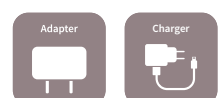
Key benefits

- > Package can be fully inserted into PCB without any issues
- > Meeting height challenges in adapter and charger applications

In standard adapter TO-220 FullPAK is inserted into PCB up to standoff, in semi-slim adapter TO-220 FullPAK needs to be fully inserted into PCB to meet height requirements.

For charger and adapter applications with power over 20 W, TO-220 FullPAK is the preferred package because of its ease of handling and superior thermal performance. However, the need for height reduction in slim and semi-slim adapters forces manufacturers to fully insert TO-220 FullPAK into the PCB rather than up to its standoff. This often causes yield and reliability challenges due to:

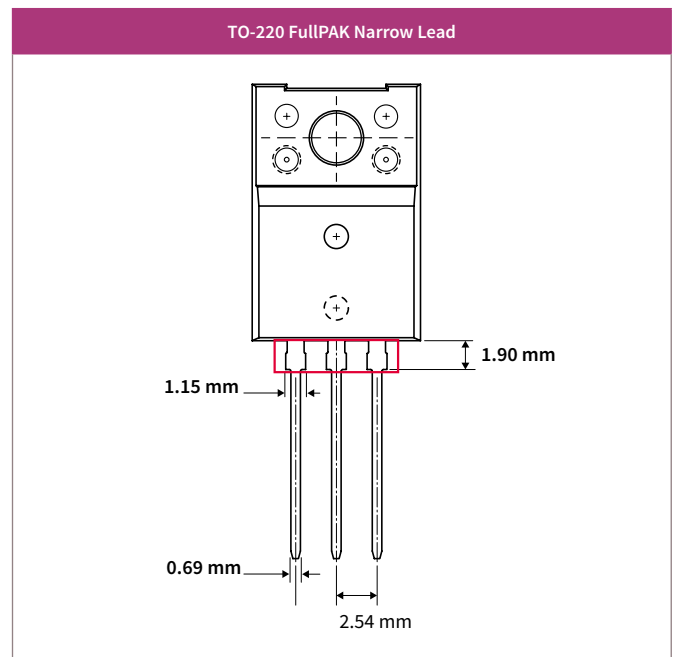
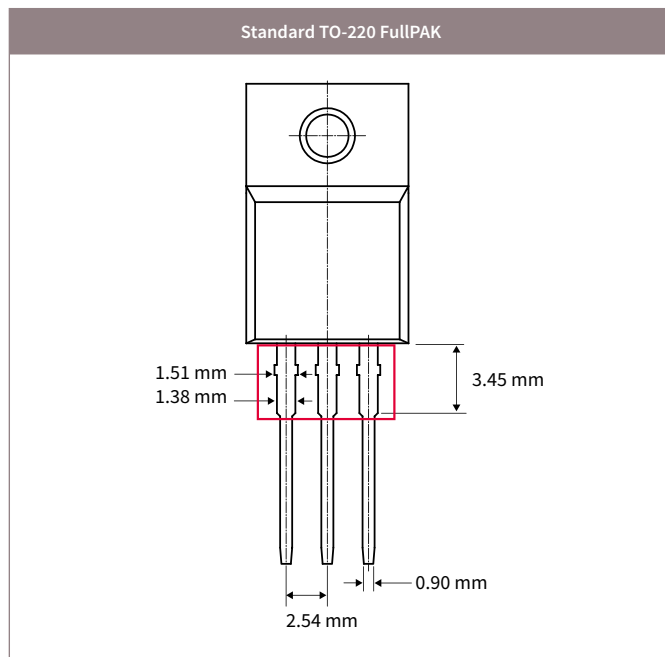
- > Significantly increased hole size on the PCB to accommodate wider standoff as compared to the leg
- > Decreased effective creepage distance (shortest hole-to-hole distance)
- > Increased possibility to have solder short on the PCB



CoolMOS™ P7 and CE SJ MOSFET in TO-220 FullPAK Narrow Lead package

Solution for height reduction in adapter and charger applications

With fully optimized standoff width and height, the TO-220 FullPAK Narrow Lead package can be fully inserted into the PCB without any of the challenges mentioned above.



Product portfolio

$R_{DS(on)}$ [mΩ]	500 V	600 V	650 V	700 V	800 V
900				IPAN70R900P7S	
800		IPAN60R800CE			
750				IPAN70R750P7S	
650		IPAN60R650CE	IPAN65R650CE		
600		IPAN60R600P7S		IPAN70R600P7S	
500	IPAN50R500CE				
450				IPAN70R450P7S	IPAN80R450P7
360		IPAN60R360P7S		IPAN70R360P7S	IPAN80R360P7
280		IPAN60R280P7S			IPAN80R280P7
180		IPAN60R180P7S			

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