

Application Note

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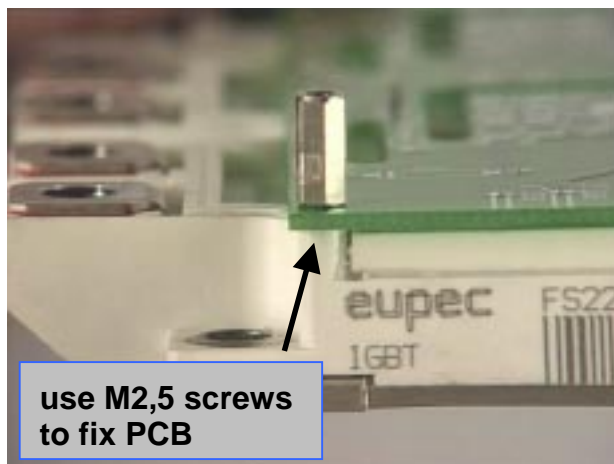
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PCB mounting on Econo modules

Econo modules such as EconoPIM and EconoPACK series are designed for high reliability and high flexibility purposes. Customer optimised pin-configurations can easily be achieved with the patented housing concept. Terminal-pins can be plugged-in at the circumferential slot positions in the plastic and are fixed by clamping. An additional fixation is achieved by the plastic cover. In contrary to the Econo2 and Econo3 modules with injection-moulded terminals, these plug-in pins are not completely enclosed.

Thinking of the assembly in converters, it is not allowed to transfer any forces via the PCB to the pin. PCBs should be screwed onto the module to minimise relative movements between the soldered-in terminals and the plastic case.

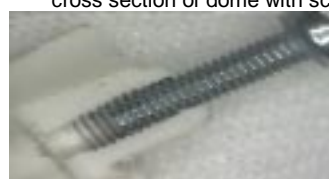
PCBs should be fixed on the module with metrical screws M2,5, self tapering screws according to DIN 7981 with a nominal diameter of 2,9 mm or equivalent stand-offs. The effective length of the screw engagement should exceed 4 mm for light PCBs and exceed 7 mm for heavy PCBs or if bending moments



are applied to PCB stacks with separate stand-offs. The thread is taped by the screw itself. Therefore a mounting torque less than 0,5 Nm is necessary.

We recommend metrical screws M2,5x8 for the use with 1 mm PCBs and M2,5x10 with 2 mm PCBs. Take into account that the first 1,5 mm of the designated dome act as guideway and will not transfer any forces.

cross section of dome with screw and self tapered thread



Metrical screw M2,5



screw DIN7981 d2,9

