



## TVCast PCB Layout Guidelines

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The TVCast SMD is an ultra low profile side view IR receiver equipped with two photodiodes and lenses for high sensitivity and a long receiving range.

In order to reduce the package height over the PCB, but maintain high sensitivity, the TVCast SMD package was designed to be recessed into a cutout in the PCB, as shown in Fig. 1 below. This technique facilitates the use of two large lenses, but reduces the headroom on top of the PCB to 1.45 mm.

The PCB cutout should be designed in such a way that the TVCast body comes into contact with the PCB at the leads and at the front of the package near the lenses. For that purpose, the TVCast package contains wings at each side.

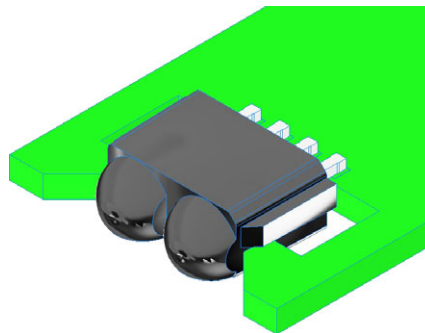


Fig. 1

The reason why the wings should not rest on top of the PCB with its entire length is the coplanarity tolerance between the leads and the wings. Whereas the four leads are specified within a coplanarity of 0.1 mm, the coplanarity between the wings and the leads can have larger tolerances. This may lead to a gap between the leads and the PCB when the package rests fully on its wings.

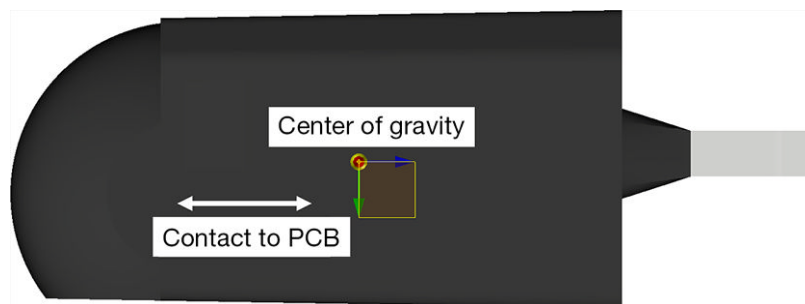


Fig. 2

For best contact of the leads to the PCB solder pads, the contact between the wings and PCB should be in front of the TVCast center of gravity near the lenses. Please see Fig. 2.