

# APPLICATION NOTES

Mill-Max's 8874-0-15-XX-11-XX-10-0 receptacle is suitable for use in both standard and bottom-entry applications.

The first mounting option is the standard through-hole application (Fig. 1). It provides a low profile with only .034" [0,86] protruding above the board. When using the receptacle in this orientation, we advise solder mounting the .038/.040" [0,97/1,02] diameter body into a .044" [1,12] minimum diameter hole; plated through or non-plated through. In addition to providing secure attachment to the PCB, the large tabs allow the PCB pads and stencil design to yield clearance between the applied solder paste and the board hole. This minimizes the chance of solder paste getting inside the open bottom of the 8874 and contaminating the contact area as the receptacle is placed in the board. The mating device is then plugged in from the top where a .044" [1,12] diameter chamfer helps guide the lead towards the center of the contact clip.

The second mounting option is the bottom-entry SMT application (Fig. 2). This option is ideal for applications where the mating lead is coming from the bottom side of the board and flush mounting of the mating device is desired. Used in this manner, the entry end of the receptacle will not protrude through boards that are greater than .024" thick, thereby allowing the plugged-in component/device to have as low a profile as possible while remaining removeable & replaceable without soldering.

In this use case we recommend the board layout to be designed with a through hole and land footprint as shown below (Fig. 3). The .048" [1,19] diameter, contact entrance end of the receptacle, passes through the board hole providing access to the mating lead below. The large tabs sit on solder pasted pads on the top side of the board assuring a solid connection after reflow soldering.

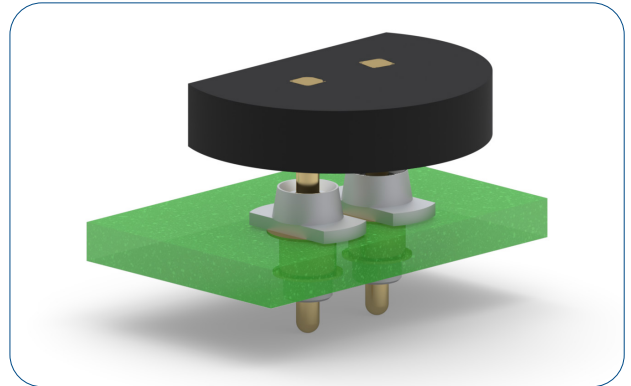


Figure 1. Mill-Max's 8874 receptacle used in a standard through-hole application.

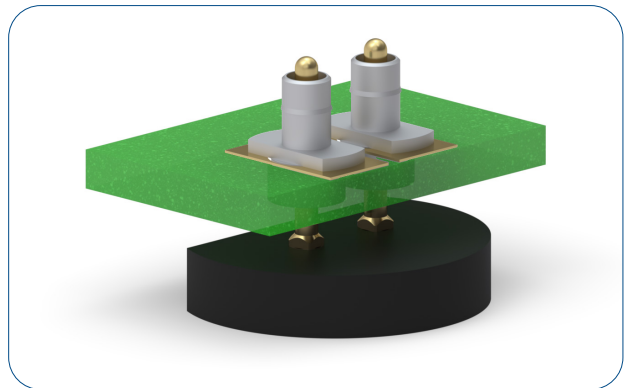


Figure 2. Mill-Max's 8874 receptacle used in a bottom-entry application.

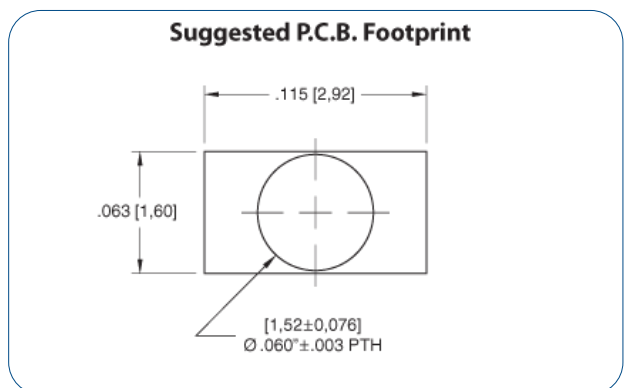


Figure 3. The suggested P.C.B. footprint for when using the 8874 receptacle in a bottom-entry application.

