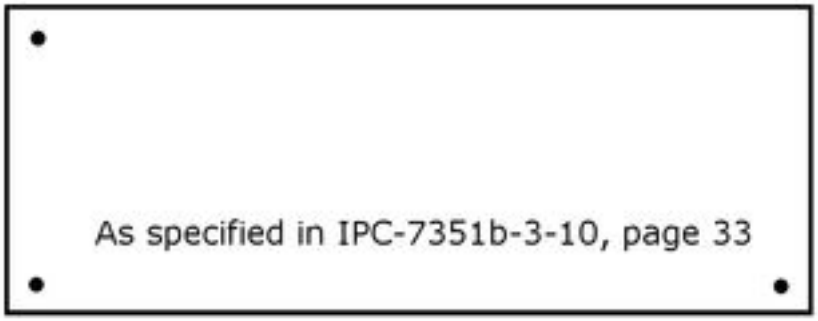
Fiddling with fiducials again

Screaming Circuits

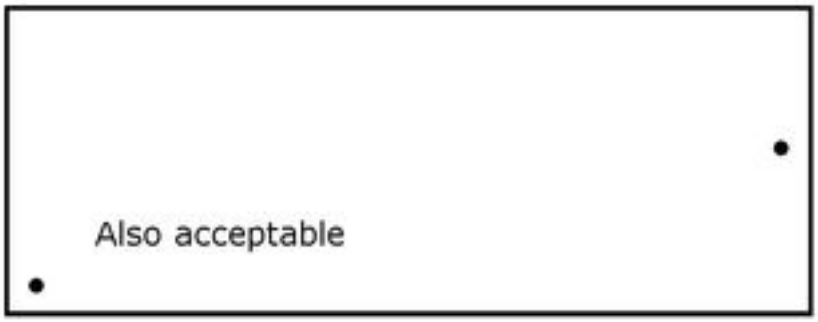
I recently posted a note about fiducials [1] but I didn't have any images. Here's a couple of examples:



[2]This first example shows what IPC would like to see. If this is an individual board, this would be it. If it were part of a panel, you would follow the same pattern on the panel rails and also put it on each individual board in the panel.

As I wrote in the earlier post, we don't require these, but it's always a good idea. You'll need them once you go into volume manufacturing anyway.

The next example won't make IPC happy, but it will make Screaming Circuits happy:



[3]It only uses two fiducial dots, but it isn't reversible. Reversibility is okay for jackets, but not for circuit boards. Since one of the dots is offset, it can't be placed on the machine and recognized as correct in any way except in the proper orientation.

The important aspect of both of these examples is that they remove ambiguity. There can't be any uncertainty, which is good because uncertainty is your enemy. It's a subtle enemy. It might not bother you 99.9 times out of a hundred, but then, when you're not looking, it can strike. So, give a hoot and stomp out ambiguity.

Duane Benson
False data can act only as a distraction. Therefore, I shall refuse to perceive.

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http://www.ecnmag.com/blogs/2012/05/fiddling-fiducials-again

Links:
[1] http://blog.screamingcircuits.com/2012/05/is-it-your-fiduciary-duty-to-use-fiducials.html
[2] http://screamingcircuits.typepad.com/.a/6a00d8341c008a53ef0163058a6af0970d-popup
[3] http://screamingcircuits.typepad.com/.a/6a00d8341c008a53ef0163058a6d83970d-popup