

Opto-shield Gluing Procedure

- 1) After wirebonding, test the fit of a shield.
 - a) The yield of the shields is low and not all fit on the guide pins. Try the fit of several shields until you find one that slides all the way down.
 - b) The shield must sit flat to maximize light coupling. Problems with flatness can be caused if the Hysol removal is not complete or if the conducting glue from the die attach process extends to where the shield must sit. If this is the case, simply scratch off the offending glue until the shield fits.
- 2) Carefully remove the shield that now fits perfectly.
- 3) Apply a bead of Hysol to the three edges. Cover the regions shown in the picture on the next page.
 - a) Be careful to keep the Hysol from touching the guide pins during this step. If it does, it is very likely that the Hysol will wick up the pins.
 - b) It is necessary that the shield be sealed with the Hysol on these three edges. The reason for this is that during the opto-pack to opto-board mounting process we want to prevent Hysol from wicking under the shield. We have destroyed arrays when this happens.
- 4) Put the tested shield back on and press flat.
- 5) Cure at 100° C for 1 hour.
- 6) Do a visual inspection.
 - a. Is the shield flat?
 - b. Is the shield sealed on the 3 edges?
 - c. Does a ferrule go completely on and sit flat with no gaps?
 - 1) It is possible for Hysol to come up the guide pin holes if too much is applied. This can be scraped away using the same methods used for cleaning the Hysol from the opto-pack and guide pins alone.
- 7) Test.

