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Notes on mounting SiSD8

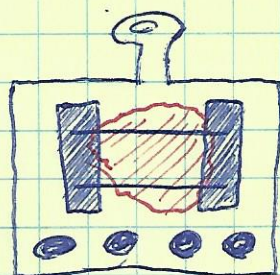
- Purpose: Make sure most recent technique for mounting Schottky diodes is documented.
- As far as I can tell the most recent notes on technique are in p. 97 of this notebook. There are slight changes in the current technique used.
- An older method (used for most of Dhruva's work) is detailed on pp. ~~46~~ 46-47 of my A notebook.

Notes:

- SiSD8 was the diode mounted today
 - Ag paste was opened today (brand new)
 - Ag paste shaken for several minutes before each application.
 - The method detailed below was at least used for 1 previous sample, the most recent SiSD6.
- This was realized as I removed SiSD6 from the platen.

Procedure

- Two small strips of 0.25 mm diameter Al wire are secured to the platen by double sided Cu tape as shown below.



Shaded areas \rightarrow Cu Tape
Red \rightarrow Ag paste

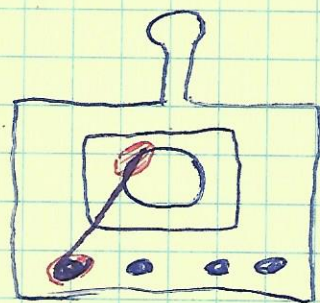
\leftarrow 4 posts

- Ag paste is placed on platen between Cu tape strips and on top of/around Al wires. Generous amount.
- Diode is placed on Ag paste and held down securely for ~ 60 seconds.
- Allow to dry for 5-10 minutes (or more) before making topside/frontside contact.

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contact cent.

- Bend a piece of 0.25 mm diameter Al wire such that it makes a loop (can be partial) around a post. Ideally it will sit by itself about half way down the post.
- Once Al wire is in the proper position apply Ag paste to the post to fix one end and apply Ag paste to the end of the Al wire resting on the Schottky contact (ideally as close to the edge of the contact as possible). Should look as shown below.



Red → Ag paste
Purple → Al wire

← 4 posts

- Use Ag paste to short a post (~~any post other than~~ not frontside post) to the platen. Generous amount.
- "To achieve full electrical and mechanical properties cure at room temperature for 16-20 hours or at 120-200 °C for 30 minutes" (from Technical Notes on the product... PELCO Colloidal Silver Paste, Product No. 16032).