

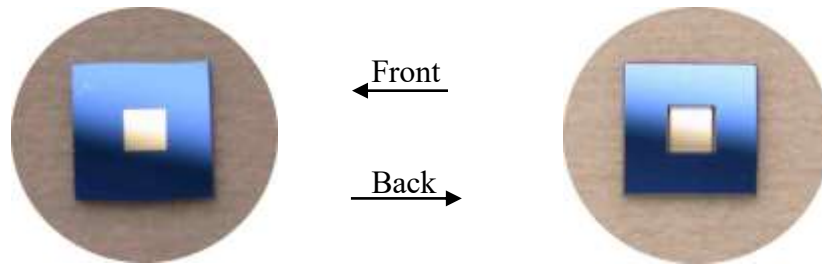


## TIPS FOR HANDLING SILICON AND NITRIDE MEMBRANES

**NORCADA'S** Silicon and Nitride membrane windows have been inspected, cleaned, and handled so as to minimize particle contamination and render them organic free. Careful handling upon receipt of **NORCADA'S** membrane windows is important to minimize further contamination. The following recommendations will help ensure proper handling of the membrane window devices. Any problems, questions, or concerns can be directed to [info@norcada.com](mailto:info@norcada.com).

- **ALWAYS KEEP THE MEMBRANE SIDE UP**

If the membrane is placed face-down on a surface, there is a likelihood that the membrane will break or the surface will become contaminated. It is recommended that the membrane be kept face-up at all times. Distinguishing the difference between the etched pit (back) and the membrane (front) is easily done by eye. The difference is illustrated below.

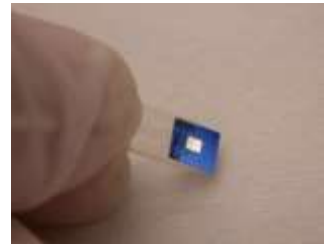


- **PICK BY THE EDGES OF DEVICE WHENEVER POSSIBLE**

Remove from package by gently squeezing the part of the capsule that is facing the membrane (see right). Be careful never to touch the centre membrane.



Once out of the package, the membrane should be placed on a clean surface (such as a clean-room wipe) and picked up by the edges only (see illustration on the left).



- **WORK WITH CLEAN AND SOFT TWEEZERS**



Organic contamination and particles are easily transferred from dirty tweezers to the membranes. Tweezers can be cleaned with IPA and blown dry with a nitrogen gun. Stainless steel tweezers are not recommended for removing the membrane from the package or during general handling. The steel tweezers can cause fracture and chipping of the silicon frame at the edges which lead to contamination of the device. We recommend the use of the softer Carbofib tweezers (such as model 18704 or 18768 from Aven Tools [www.aventools.com](http://www.aventools.com)) or similar tweezers.

- **STORAGE**

It is very important to keep the device capsules dry all the time as water can dissolve the capsules in time. For long-term storage, the device capsules should be kept in a cool and dry environment to avoid potential damage.