

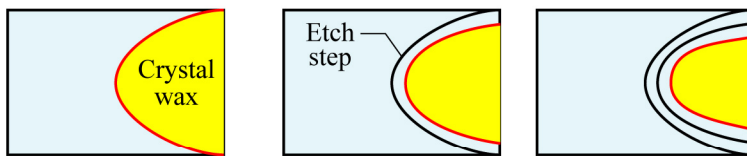
Procedure to establish wet etching rates

The following procedure can be used to determine wet chemical etching rates:

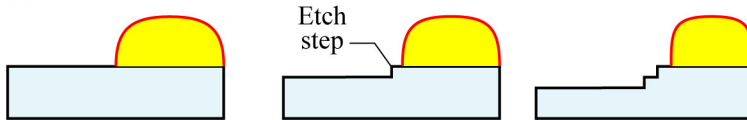
- Put semiconductor sample (size approximately 5 mm × 5 mm) on a hot plate, hot enough to melt crystal wax (also called clear wax)
- Chip off very small piece of crystal wax and put chip on sample
- Wait until chip melts and distributes over sample surface
- Etch sample in wet chemical etch for a given time
- Remove clear wax by acetone followed by methanol (or isopropanol) rinse
- Measure etch depth using surface profiler
- Repeat procedure several times

Sketch below shows sample at different stages:

(a) Top view



(b) Side view



(c) Photograph of GaAs sample



Diagram below establishes etch rate:

