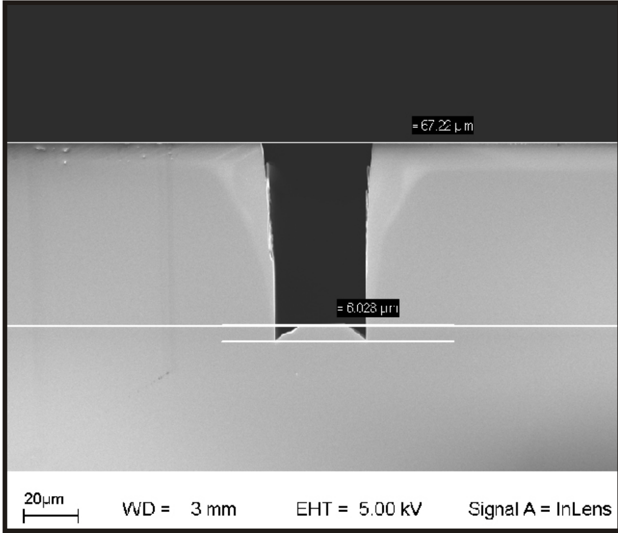
SV-01
www.oxfordplasma.de/process/sic_via.htm

OXFORD INSTRUMENTS

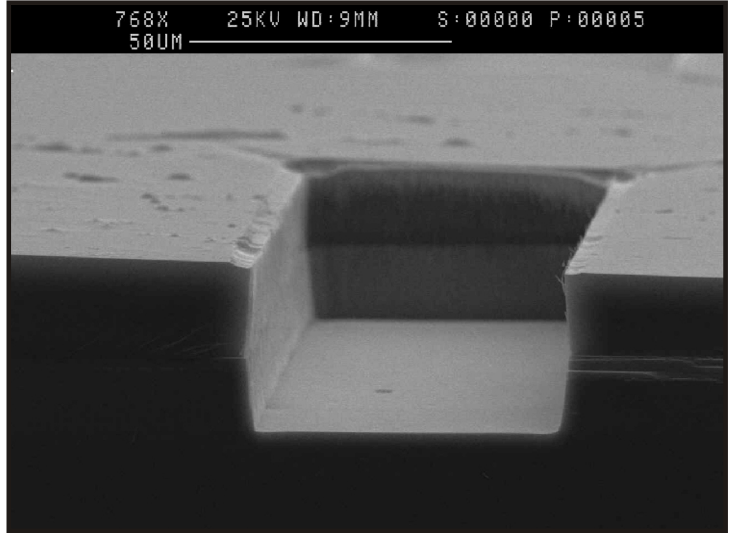
© Oxford Instruments plc
July 2007
email: plasma@oxford.de

Plasmalab Data

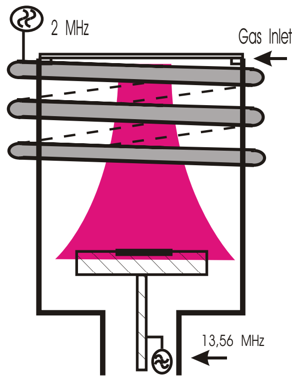
SiC Via Hole ICP Etching



OPT application lab:
70 µm deep, anisotropic SiC via hole
at 650 nm/ min
using thick PR and He backside cooling

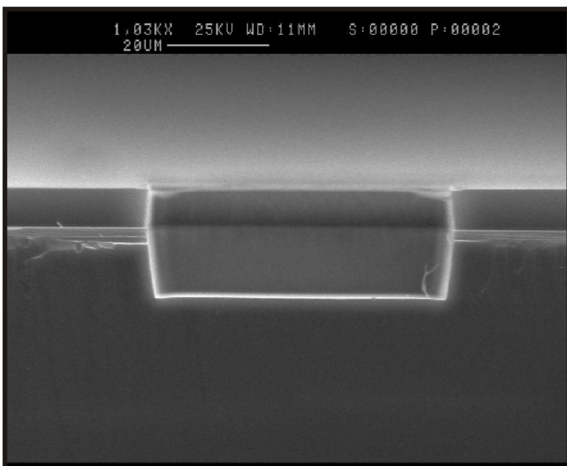


OPT application lab:
10 µm deep etch at > 83° wall angle
> 0.3 µm/ min etch rate
selectivity to SU8 > 0.5 : 1
no trenching



Plasmalab System 100
Plasmalab System 133
Plasmalab 80 Plus

OPT application lab:
3 µm deep, isotropic SiC etch



Technology:
Reactive Ion Etching
with ICP Source (13.56 MHz)
Inductive Coupled Plasma
RF driven substrate electrode
substrate temperature control
Fluorine based process

SiC backside thinning works from
2 µm/ min for single wafers up to
0.35 µm/ min for large batches
(12 3" wafer)