

Photo-Imageable Dielectric (PID)

WPR / FG Series

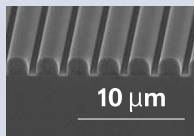
Common Features

High Resolution
Low shrinkage
Good adhesion

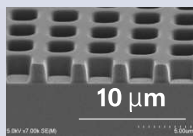
FT = 15~60 μm

FT = 5~15 μm

FT = 1~5 μm

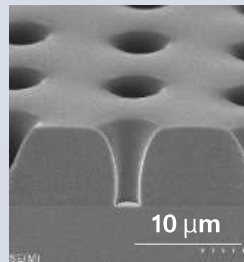


0.5 μm-Space



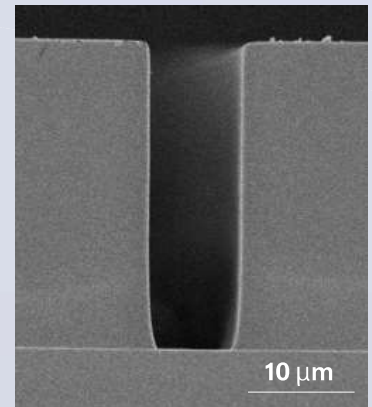
2 μm-SQ

2 μm



2 μm-SQ

10 μm



10 μm-Space

30 μm

FG (Positive-tone)

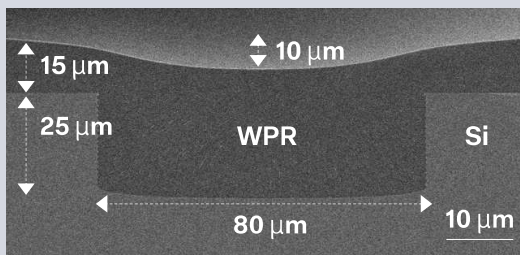
- ✓ Low Dk : 2.9
- ✓ Low cure shrinkage : 5%
- ✓ h-line LDI

WPR (Positive-tone)

- ✓ Round profile
- ✓ High Tg : 345 °C
- ✓ h-line LDI

WPR (Negative-tone)

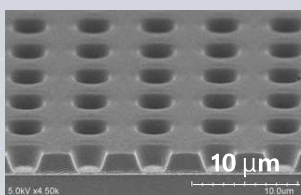
- ✓ Rectangle profile
- ✓ Gap-filling
- ✓ CMP and Hybrid bonding



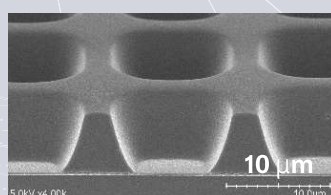
Cross-section after TCT (-55 °C ⇄ 125 °C / 700 cycle)

- ✓ 25 μm deep gap was fully with WPR.
- ✓ No delamination and crack after TCT.

PI Series



2 μm-SQ



7 μm-SQ

2 μm

7 μm

PI (Positive-tone)

- ✓ Good elongation : 45%
- ✓ High Tg : 310 °C
- ✓ Low CTE : 43 ppm / °C