



# SIPR-9332BE1

## Thick Film

## Positive Photoresist

### Spray Coating Compatible

#### High Thermal Stability

The SIPR positive photoresist line has been formulated To give outstanding results in thicker photoresist Films. Highly vertical sidewalls are achieved using the SIPR one component positive photoresist. The SIPR one component positive photoresist, by binding sensitizer covalently to the

resin, achieves high resolution with low optical absorption and high aspect ratio.

SIPR positive photoresists have been formulated to meet the highly demanding applications of thin film Head manufacturing, high voltage ion implantation And aggressive etch processing.

**DoF (2 μm L/S) 140 mJ/cm<sup>2</sup>**

#### Dehydration Bake -3 μm

150°C x 120 sec

#### HMDS Primed

23°C x 120 sec

#### Resist Apply

1.185 μm

#### P.B.

90°C x 120 sec

#### Exposure

NSR-1755i7A

NA=0.50, σ=0.6

#### PEB

None

#### Development

SSFD-238

(2.38% TMAH)

65 sec



#### -2 μm



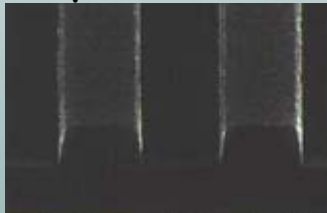
#### -1 μm



#### ±0 μm



#### +1 μm



#### +2 μm



#### +3 μm



**Linearity (<1.5 μm) 140 mJ/cm<sup>2</sup>**

#### Dehydration Bake

150°C x 120 sec

#### HMDS Primed

23°C x 120 sec

#### Resist Apply

1.185 μm

#### P.B.

90°C x 120 sec

#### Exposure

NSR-1755i7A

NA=0.50, σ=0.6

#### PEB

None

#### Development

SSFD-238

(2.38% TMAH) Puddle

65 sec

#### 1.5 μm



#### 1.0 μm



#### 0.8 μm



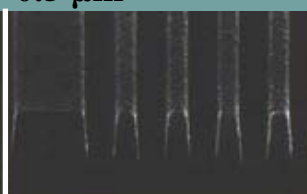
#### 0.7 μm



#### 0.6 μm



#### 0.5 μm



#### 0.4 μm



### Dehydration Bake:

150°C x 120 sec

### HMDS Primed:

23°C x 120 sec

### Resist Apply:

1.185 µm

### P.B.:

90°C x 120 sec

### Exposure:

NSR-1755i7A

NA=0.50, σ=0.6

### PEB:

without PEB

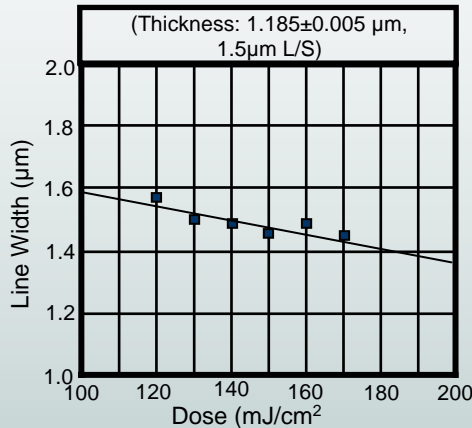
### Development:

SSFD-238

(2.38% TMAH)

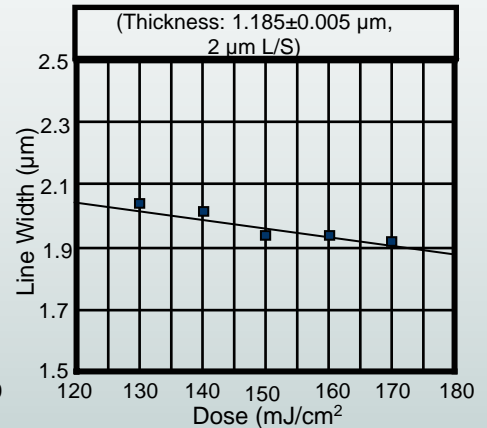
65 sec

### Eop



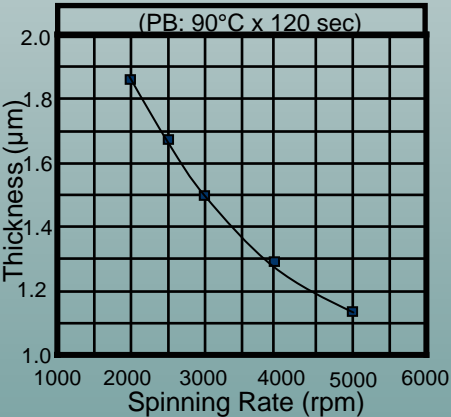
■ 603343  $y=1.849-2.5286e-3x$   $R^2=0.881$

### Eop



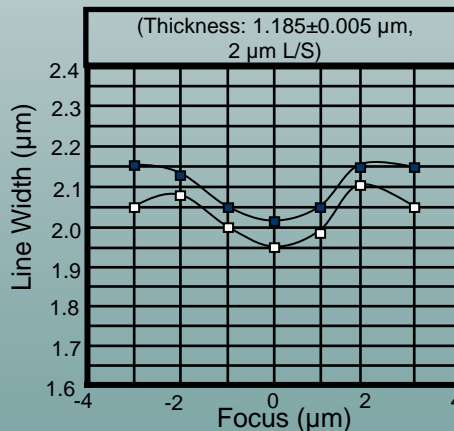
■ 603343  $y=2.4245-2.9800e-3x$   $R^2=0.958$

### Thickness



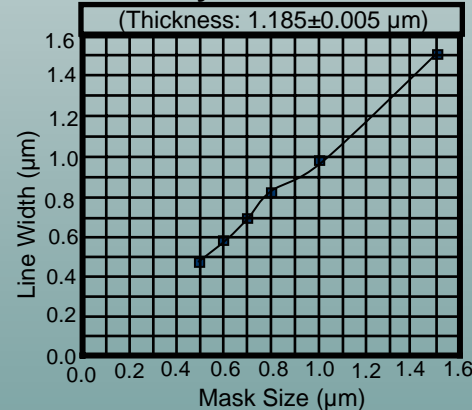
■ Thickness

### DoF



■ 140 J/cm² □ 150 J/cm²

### Linearity



■ 140 mJ/cm²