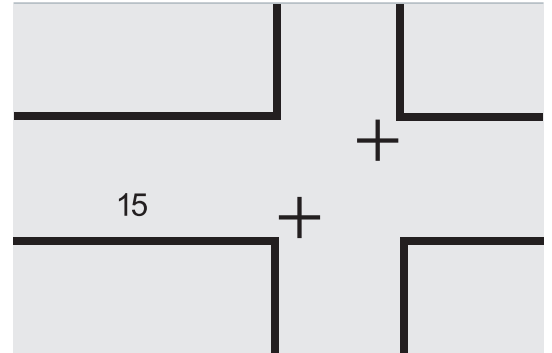


# Patterned Chrome

## Opaque and Low Reflective Coating

Chrome patterns on planar components are widely used in the optical and semiconductor industry. Materion Balzers Optics puts its emphasis on high resolution, low defect patterns – optionally in combination with low defect functional coatings. In most applications the Chrome transmittance and reflectance shall be low. Furthermore the edge performance of the Chrome pattern plays an important role.



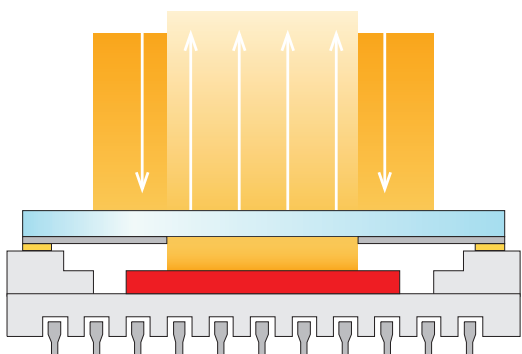
## Benefits

- Excellent adhesion on glass
- Low reflectance, low transmittance
- High resolution patterns possible
- High cosmetical performance (Low pinhole density)

## Applications

- Apertures on lids for microdisplays (front projection)
- Masking of patterned filters for optical sensors
- Masking of color filters for light projection
- Masks for photolithography
- Alignment marks and patterns
- Micro size marking
- etc.

Patterned Chrome applied as aperture defining a light beam of a projected picture.



## Technical Data

### Chrome MRC Transmittance

OD > 3

### Chrome MRC Reflectance

R = 28% at 436nm

### Chrome LRC Transmittance

OD > 3

### Chrome LRC Reflectance

R = 13% at 436nm

### Minimum feature size

5  $\mu$ m

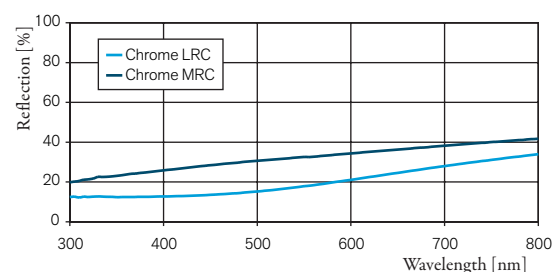
### Critical dimension

$\pm 1 \mu$ m

### Typical substrate sizes

5" square

## Chrome Reflection



## Chrome Transmittance

