

# Optical Parallels

## OPB/OPSQ/OPSQK

**RoHS**

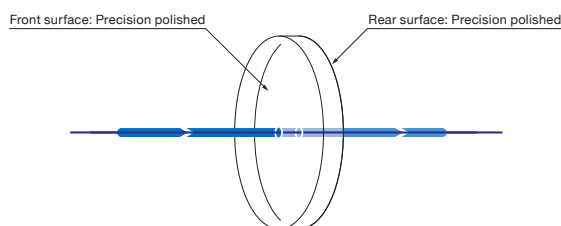
Optical Parallels are precision substrates polished on both sides with excellent surface quality and surface flatness.

These substrates can be used with thin film coatings to make custom windows and beamsplitters.

- The Optical Parallels are available in BK7 for visible and infrared wavelength range, synthetic fused silica for high ultra-violet transmission, and a synthetic fused silica for excimer laser that can be used for KrF excimer laser (248nm).
- The high accuracy of the substrate parallels does not change the angle of the transmitted beam when you insert it parallel to the substrate perpendicular to the optical path of the laser.
- The high surface precision substrate can also be used instead of a Newton test plate.



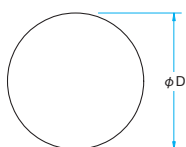
### Schematic



### Outline Drawing

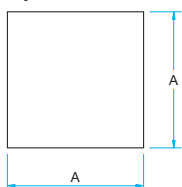
(in mm)

#### ● Circle



- Tolerance
- $\phi D \leq \phi 50.8$
- Diameter  $\phi D_{-0.1}^{\circ}$
- Thickness  $t \pm 0.1$
- $\phi D \geq \phi 60$
- Diameter  $\phi D_{-0.2}^{\circ}$
- Thickness  $t \pm 0.2$

#### ● Square



- Tolerance
- $A \leq 50$
- Length  $A_{-0.1}^{\circ}$
- Thickness  $t \pm 0.1$
- $A \geq 60$
- Length  $A_{-0.2}^{\circ}$
- Thickness  $t \pm 0.2$

### Specifications

Material	BK7, Synthetic fused silica, Synthetic fused silica for excimer laser
Clear aperture	90% of actual aperture, or a circle or ellipse inscribed in the rectangle of 90% Dimensions
Surface Quality (Scratch-Dig)	BK7: 10-5 Synthetic fused silica, Synthetic fused silica for Excimer Laser: 20-10

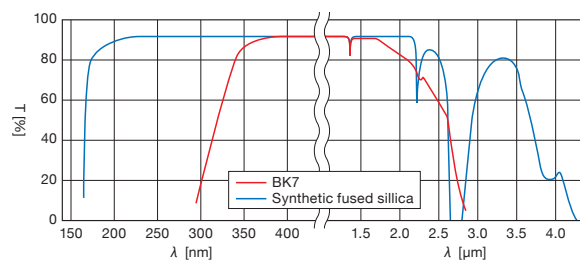
### Guide

- ▶ There are also wedge substrate (WSB/WSSQ/WSSQK) available which can prevent the influence of back reflection.
- ▶ We also offer the fabrication of the substrates with coating per your specific specifications, contact our Sales Division with your request.

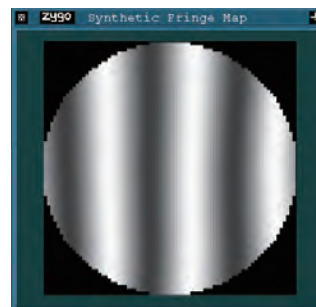
### Attention

- ▶ Transmissions losses due to reflection off the front and rear surfaces of the Parallel flat substrate can be minimized by coating the surfaces. Consult our Sales Division for anti-reflection coatings suitable for your application.
- ▶ A data sheet for accuracy guarantee of the surface flatness is not included with the product. If you need a guarantee sheet of the flatness data, Please contact our Sales Division for a quotation.

### Typical Transmittance Data



### Surface Accuracy Data (reference data)



- Surface accuracy measurement method: Measured with Zygo laser interferometer
- Surface accuracy measurement wavelength 632.8nm
- Surface accuracy guaranteed temperature 23°C±2°C

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BK7/Circle $\phi 10 - \phi 20$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-10C01-10-5	$\phi 10$	1	$\lambda/10$	$<00'05''$
OPB-10C01-4-5	$\phi 10$	1	$\lambda/4$	$<00'05''$
OPB-10C01-1-5	$\phi 10$	1	$\lambda$	$<00'05''$
OPB-10C01-P	$\phi 10$	1	$4\lambda^*$	$<03'00''$
OPB-10C02-20-2	$\phi 10$	2	$\lambda/20$	$<00'02''$
OPB-10C02-10-5	$\phi 10$	2	$\lambda/10$	$<00'05''$
OPB-10C02-4-5	$\phi 10$	2	$\lambda/4$	$<00'05''$
OPB-10C02-1-5	$\phi 10$	2	$\lambda$	$<00'05''$
OPB-10C02-P	$\phi 10$	2	$4\lambda^*$	$<03'00''$
OPB-10C03-20-2	$\phi 10$	3	$\lambda/20$	$<00'02''$
OPB-10C03-10-5	$\phi 10$	3	$\lambda/10$	$<00'05''$
OPB-10C03-4-5	$\phi 10$	3	$\lambda/4$	$<00'05''$
OPB-10C03-1-5	$\phi 10$	3	$\lambda$	$<00'05''$
OPB-10C03-P	$\phi 10$	3	$4\lambda^*$	$<03'00''$
OPB-10C05-20-2	$\phi 10$	5	$\lambda/20$	$<00'02''$
OPB-10C05-10-5	$\phi 10$	5	$\lambda/10$	$<00'05''$
OPB-10C05-4-5	$\phi 10$	5	$\lambda/4$	$<00'05''$
OPB-10C05-1-5	$\phi 10$	5	$\lambda$	$<00'05''$
OPB-10C05-P	$\phi 10$	5	$4\lambda^*$	$<03'00''$
OPB-12.7C03-10-5	$\phi 12.7$	3	$\lambda/10$	$<00'05''$
OPB-12.7C03-4-5	$\phi 12.7$	3	$\lambda/4$	$<00'05''$
OPB-12.7C05-10-5	$\phi 12.7$	5	$\lambda/10$	$<00'05''$
OPB-12.7C05-4-5	$\phi 12.7$	5	$\lambda/4$	$<00'05''$
OPB-15C01-1-5	$\phi 15$	1	$\lambda$	$<00'05''$
OPB-15C01-P	$\phi 15$	1	$4\lambda^*$	$<03'00''$
OPB-15C02-10-5	$\phi 15$	2	$\lambda/10$	$<00'05''$
OPB-15C02-4-5	$\phi 15$	2	$\lambda/4$	$<00'05''$
OPB-15C02-1-5	$\phi 15$	2	$\lambda$	$<00'05''$
OPB-15C02-P	$\phi 15$	2	$4\lambda^*$	$<03'00''$
OPB-15C03-20-2	$\phi 15$	3	$\lambda/20$	$<00'02''$
OPB-15C03-10-5	$\phi 15$	3	$\lambda/10$	$<00'05''$
OPB-15C03-4-5	$\phi 15$	3	$\lambda/4$	$<00'05''$
OPB-15C03-1-5	$\phi 15$	3	$\lambda$	$<00'05''$
OPB-15C03-P	$\phi 15$	3	$4\lambda^*$	$<03'00''$
OPB-15C05-20-2	$\phi 15$	5	$\lambda/20$	$<00'02''$
OPB-15C05-10-5	$\phi 15$	5	$\lambda/10$	$<00'05''$
OPB-15C05-4-5	$\phi 15$	5	$\lambda/4$	$<00'05''$
OPB-15C05-1-5	$\phi 15$	5	$\lambda$	$<00'05''$
OPB-15C05-P	$\phi 15$	5	$4\lambda^*$	$<03'00''$
OPB-20C01-1-5	$\phi 20$	1	$\lambda$	$<00'05''$
OPB-20C01-P	$\phi 20$	1	$4\lambda^*$	$<03'00''$
OPB-20C02-10-5	$\phi 20$	2	$\lambda/10$	$<00'05''$
OPB-20C02-4-5	$\phi 20$	2	$\lambda/4$	$<00'05''$
OPB-20C02-1-5	$\phi 20$	2	$\lambda$	$<00'05''$
OPB-20C02-P	$\phi 20$	2	$4\lambda^*$	$<03'00''$
OPB-20C03-20-2	$\phi 20$	3	$\lambda/20$	$<00'02''$
OPB-20C03-10-5	$\phi 20$	3	$\lambda/10$	$<00'05''$
OPB-20C03-4-5	$\phi 20$	3	$\lambda/4$	$<00'05''$
OPB-20C03-1-5	$\phi 20$	3	$\lambda$	$<00'05''$
OPB-20C03-P	$\phi 20$	3	$4\lambda^*$	$<03'00''$
OPB-20C05-20-2	$\phi 20$	5	$\lambda/20$	$<00'02''$
OPB-20C05-10-5	$\phi 20$	5	$\lambda/10$	$<00'05''$
OPB-20C05-4-5	$\phi 20$	5	$\lambda/4$	$<00'05''$
OPB-20C05-1-5	$\phi 20$	5	$\lambda$	$<00'05''$
OPB-20C05-P	$\phi 20$	5	$4\lambda^*$	$<03'00''$

\*  $4\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

BK7/Circle $\phi 25 - \phi 40$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-25C01-1-5	$\phi 25$	1	$\lambda$	$<00'05''$
OPB-25C01-P	$\phi 25$	1	$4\lambda^*$	$<03'00''$
OPB-25C02-10-5	$\phi 25$	2	$\lambda/10$	$<00'05''$
OPB-25C02-4-5	$\phi 25$	2	$\lambda/4$	$<00'05''$
OPB-25C02-1-5	$\phi 25$	2	$\lambda$	$<00'05''$
OPB-25C02-P	$\phi 25$	2	$4\lambda^*$	$<03'00''$
OPB-25C03-10-5	$\phi 25$	3	$\lambda/10$	$<00'05''$
OPB-25C03-4-5	$\phi 25$	3	$\lambda/4$	$<00'05''$
OPB-25C03-1-5	$\phi 25$	3	$\lambda$	$<00'05''$
OPB-25C03-P	$\phi 25$	3	$4\lambda^*$	$<03'00''$
OPB-25C05-20-2	$\phi 25$	5	$\lambda/20$	$<00'02''$
OPB-25C05-10-5	$\phi 25$	5	$\lambda/10$	$<00'05''$
OPB-25C05-4-5	$\phi 25$	5	$\lambda/4$	$<00'05''$
OPB-25C05-1-5	$\phi 25$	5	$\lambda$	$<00'05''$
OPB-25C05-P	$\phi 25$	5	$4\lambda^*$	$<03'00''$
OPB-25.4C03-10-5	$\phi 25.4$	3	$\lambda/10$	$<00'05''$
OPB-25.4C03-4-5	$\phi 25.4$	3	$\lambda/4$	$<00'05''$
OPB-25.4C05-10-5	$\phi 25.4$	5	$\lambda/10$	$<00'05''$
OPB-25.4C05-4-5	$\phi 25.4$	5	$\lambda/4$	$<00'05''$
OPB-30C01-1-5	$\phi 30$	1	$\lambda$	$<00'05''$
OPB-30C01-P	$\phi 30$	1	$4\lambda^*$	$<03'00''$
OPB-30C02-10-5	$\phi 30$	2	$\lambda/10$	$<00'05''$
OPB-30C02-4-5	$\phi 30$	2	$\lambda/4$	$<00'05''$
OPB-30C02-1-5	$\phi 30$	2	$\lambda$	$<00'05''$
OPB-30C02-P	$\phi 30$	2	$4\lambda^*$	$<03'00''$
OPB-30C03-10-5	$\phi 30$	3	$\lambda/10$	$<00'05''$
OPB-30C03-4-5	$\phi 30$	3	$\lambda/4$	$<00'05''$
OPB-30C03-1-5	$\phi 30$	3	$\lambda$	$<00'05''$
OPB-30C03-P	$\phi 30$	3	$4\lambda^*$	$<03'00''$
OPB-30C04-10-5	$\phi 30$	4	$\lambda/10$	$<00'05''$
OPB-30C04-4-5	$\phi 30$	4	$\lambda/4$	$<00'05''$
OPB-30C04-1-5	$\phi 30$	4	$\lambda$	$<00'05''$
OPB-30C04-P	$\phi 30$	4	$4\lambda^*$	$<03'00''$
OPB-30C05-20-2	$\phi 30$	5	$\lambda/20$	$<00'02''$
OPB-30C05-10-5	$\phi 30$	5	$\lambda/10$	$<00'05''$
OPB-30C05-4-5	$\phi 30$	5	$\lambda/4$	$<00'05''$
OPB-30C05-1-5	$\phi 30$	5	$\lambda$	$<00'05''$
OPB-30C05-P	$\phi 30$	5	$4\lambda^*$	$<03'00''$
OPB-40C01-1-5	$\phi 40$	1	$\lambda$	$<00'05''$
OPB-40C01-P	$\phi 40$	1	$4\lambda^*$	$<03'00''$
OPB-40C02-1-5	$\phi 40$	2	$\lambda$	$<00'05''$
OPB-40C02-P	$\phi 40$	2	$4\lambda^*$	$<03'00''$
OPB-40C03-4-5	$\phi 40$	3	$\lambda/4$	$<00'05''$
OPB-40C03-1-5	$\phi 40$	3	$\lambda$	$<00'05''$
OPB-40C03-P	$\phi 40$	3	$4\lambda^*$	$<03'00''$
OPB-40C04-10-5	$\phi 40$	4	$\lambda/10$	$<00'05''$
OPB-40C04-4-5	$\phi 40$	4	$\lambda/4$	$<00'05''$
OPB-40C04-1-5	$\phi 40$	4	$\lambda$	$<00'05''$
OPB-40C04-P	$\phi 40$	4	$4\lambda^*$	$<03'00''$
OPB-40C06-20-2	$\phi 40$	6	$\lambda/20$	$<00'02''$
OPB-40C06-10-5	$\phi 40$	6	$\lambda/10$	$<00'05''$
OPB-40C06-4-5	$\phi 40$	6	$\lambda/4$	$<00'05''$
OPB-40C06-1-5	$\phi 40$	6	$\lambda$	$<00'05''$
OPB-40C06-P	$\phi 40$	6	$4\lambda^*$	$<03'00''$

\*  $4\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

### Compatible Optic Mounts

MLH-10, -15 / MHG-MP12.7-NL / BSHL-15-2, -20-2 / MHG-HS25-NL, -HS30-NL / MHAN-40S

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BK7/Circle $\phi 50 - \phi 80$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-50C01-1-5	$\phi 50$	1	$\lambda$	<00'05"
OPB-50C01-P	$\phi 50$	1	4 $\lambda^*$	<03'00"
OPB-50C02-1-5	$\phi 50$	2	$\lambda$	<00'05"
OPB-50C02-P	$\phi 50$	2	4 $\lambda^*$	<03'00"
OPB-50C03-4-5	$\phi 50$	3	$\lambda/4$	<00'05"
OPB-50C03-1-5	$\phi 50$	3	$\lambda$	<00'05"
OPB-50C03-P	$\phi 50$	3	4 $\lambda^*$	<03'00"
OPB-50C05-10-5	$\phi 50$	5	$\lambda/10$	<00'05"
OPB-50C05-4-5	$\phi 50$	5	$\lambda/4$	<00'05"
OPB-50C05-1-5	$\phi 50$	5	$\lambda$	<00'05"
OPB-50C05-P	$\phi 50$	5	4 $\lambda^*$	<03'00"
OPB-50C08-20-2	$\phi 50$	8	$\lambda/20$	<00'02"
OPB-50C08-10-5	$\phi 50$	8	$\lambda/10$	<00'05"
OPB-50C08-4-5	$\phi 50$	8	$\lambda/4$	<00'05"
OPB-50C08-1-5	$\phi 50$	8	$\lambda$	<00'05"
OPB-50C08-P	$\phi 50$	8	4 $\lambda^*$	<03'00"
OPB-50.8C05-10-5	$\phi 50.8$	5	$\lambda/10$	<00'05"
OPB-50.8C05-4-5	$\phi 50.8$	5	$\lambda/4$	<00'05"
OPB-50.8C08-10-5	$\phi 50.8$	8	$\lambda/10$	<00'05"
OPB-50.8C08-4-5	$\phi 50.8$	8	$\lambda/4$	<00'05"
OPB-60C03-1-5	$\phi 60$	3	$\lambda$	<00'05"
OPB-60C03-P	$\phi 60$	3	4 $\lambda^*$	<03'00"
OPB-60C06-10-5	$\phi 60$	6	$\lambda/10$	<00'05"
OPB-60C06-4-5	$\phi 60$	6	$\lambda/4$	<00'05"
OPB-60C06-1-5	$\phi 60$	6	$\lambda$	<00'05"
OPB-60C06-P	$\phi 60$	6	4 $\lambda^*$	<03'00"
OPB-60C10-20-2	$\phi 60$	10	$\lambda/20$	<00'02"
OPB-60C10-10-5	$\phi 60$	10	$\lambda/10$	<00'05"
OPB-60C10-4-5	$\phi 60$	10	$\lambda/4$	<00'05"
OPB-60C10-1-5	$\phi 60$	10	$\lambda$	<00'05"
OPB-60C10-P	$\phi 60$	10	4 $\lambda^*$	<03'00"
OPB-80C08-10-5	$\phi 80$	8	$\lambda/10$	<00'05"
OPB-80C08-4-5	$\phi 80$	8	$\lambda/4$	<00'05"
OPB-80C08-1-5	$\phi 80$	8	$\lambda$	<00'05"
OPB-80C08-P	$\phi 80$	8	4 $\lambda^*$	<03'00"
OPB-80C12-20-2	$\phi 80$	12	$\lambda/20$	<00'02"
OPB-80C12-10-5	$\phi 80$	12	$\lambda/10$	<00'05"
OPB-80C12-4-5	$\phi 80$	12	$\lambda/4$	<00'05"
OPB-80C12-1-5	$\phi 80$	12	$\lambda$	<00'05"
OPB-80C12-P	$\phi 80$	12	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30$ mm.

BK7/Circle $\phi 100 - \phi 150$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-100C10-10-5	$\phi 100$	10	$\lambda/10$	<00'05"
OPB-100C10-4-5	$\phi 100$	10	$\lambda/4$	<00'05"
OPB-100C10-1-5	$\phi 100$	10	$\lambda$	<00'05"
OPB-100C10-P	$\phi 100$	10	4 $\lambda^*$	<03'00"
OPB-100C15-20-2	$\phi 100$	15	$\lambda/20$	<00'02"
OPB-100C15-10-5	$\phi 100$	15	$\lambda/10$	<00'05"
OPB-100C15-4-5	$\phi 100$	15	$\lambda/4$	<00'05"
OPB-100C15-1-5	$\phi 100$	15	$\lambda$	<00'05"
OPB-100C15-P	$\phi 100$	15	4 $\lambda^*$	<03'00"
OPB-130C13-10-5	$\phi 130$	13	$\lambda/10$	<00'05"
OPB-130C13-4-5	$\phi 130$	13	$\lambda/4$	<00'05"
OPB-130C13-1-5	$\phi 130$	13	$\lambda$	<00'05"
OPB-130C13-P	$\phi 130$	13	4 $\lambda^*$	<03'00"
OPB-130C18-10-5	$\phi 130$	18	$\lambda/10$	<00'05"
OPB-130C18-4-5	$\phi 130$	18	$\lambda/4$	<00'05"
OPB-130C18-1-5	$\phi 130$	18	$\lambda$	<00'05"
OPB-130C18-P	$\phi 130$	18	4 $\lambda^*$	<03'00"
OPB-150C15-10-5	$\phi 150$	15	$\lambda/10$	<00'05"
OPB-150C15-4-5	$\phi 150$	15	$\lambda/4$	<00'05"
OPB-150C15-1-5	$\phi 150$	15	$\lambda$	<00'05"
OPB-150C15-P	$\phi 150$	15	4 $\lambda^*$	<03'00"
OPB-150C20-10-5	$\phi 150$	20	$\lambda/10$	<00'05"
OPB-150C20-4-5	$\phi 150$	20	$\lambda/4$	<00'05"
OPB-150C20-1-5	$\phi 150$	20	$\lambda$	<00'05"
OPB-150C20-P	$\phi 150$	20	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30$ mm.

## Compatible Optic Mounts

MHG-PM50-NL, -PM50.8-NL, -80-NL, -100-NL / MHA-130AS, -150S / MHAN-60S



BK7/Square □10 – □20				
Part Number	Length A [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-10S01-10-5	□10	1	$\lambda/10$	<00'05"
OPB-10S01-4-5	□10	1	$\lambda/4$	<00'05"
OPB-10S01-1-5	□10	1	$\lambda$	<00'05"
OPB-10S01-P	□10	1	4 $\lambda^*$	<03'00"
OPB-10S02-20-2	□10	2	$\lambda/20$	<00'02"
OPB-10S02-10-5	□10	2	$\lambda/10$	<00'05"
OPB-10S02-4-5	□10	2	$\lambda/4$	<00'05"
OPB-10S02-1-5	□10	2	$\lambda$	<00'05"
OPB-10S02-P	□10	2	4 $\lambda^*$	<03'00"
OPB-10S03-20-2	□10	3	$\lambda/20$	<00'02"
OPB-10S03-10-5	□10	3	$\lambda/10$	<00'05"
OPB-10S03-4-5	□10	3	$\lambda/4$	<00'05"
OPB-10S03-1-5	□10	3	$\lambda$	<00'05"
OPB-10S03-P	□10	3	4 $\lambda^*$	<03'00"
OPB-10S05-20-2	□10	5	$\lambda/20$	<00'02"
OPB-10S05-10-5	□10	5	$\lambda/10$	<00'05"
OPB-10S05-4-5	□10	5	$\lambda/4$	<00'05"
OPB-10S05-1-5	□10	5	$\lambda$	<00'05"
OPB-10S05-P	□10	5	4 $\lambda^*$	<03'00"
OPB-15S01-1-5	□15	1	$\lambda$	<00'05"
OPB-15S01-P	□15	1	4 $\lambda^*$	<03'00"
OPB-15S02-10-5	□15	2	$\lambda/10$	<00'05"
OPB-15S02-4-5	□15	2	$\lambda/4$	<00'05"
OPB-15S02-1-5	□15	2	$\lambda$	<00'05"
OPB-15S02-P	□15	2	4 $\lambda^*$	<03'00"
OPB-15S03-20-2	□15	3	$\lambda/20$	<00'02"
OPB-15S03-10-5	□15	3	$\lambda/10$	<00'05"
OPB-15S03-4-5	□15	3	$\lambda/4$	<00'05"
OPB-15S03-1-5	□15	3	$\lambda$	<00'05"
OPB-15S03-P	□15	3	4 $\lambda^*$	<03'00"
OPB-15S05-20-2	□15	5	$\lambda/20$	<00'02"
OPB-15S05-10-5	□15	5	$\lambda/10$	<00'05"
OPB-15S05-4-5	□15	5	$\lambda/4$	<00'05"
OPB-15S05-1-5	□15	5	$\lambda$	<00'05"
OPB-15S05-P	□15	5	4 $\lambda^*$	<03'00"
OPB-20S01-1-5	□20	1	$\lambda$	<00'05"
OPB-20S01-P	□20	1	4 $\lambda^*$	<03'00"
OPB-20S02-10-5	□20	2	$\lambda/10$	<00'05"
OPB-20S02-4-5	□20	2	$\lambda/4$	<00'05"
OPB-20S02-1-5	□20	2	$\lambda$	<00'05"
OPB-20S02-P	□20	2	4 $\lambda^*$	<03'00"
OPB-20S03-20-2	□20	3	$\lambda/20$	<00'02"
OPB-20S03-10-5	□20	3	$\lambda/10$	<00'05"
OPB-20S03-4-5	□20	3	$\lambda/4$	<00'05"
OPB-20S03-1-5	□20	3	$\lambda$	<00'05"
OPB-20S03-P	□20	3	4 $\lambda^*$	<03'00"
OPB-20S05-20-2	□20	5	$\lambda/20$	<00'02"
OPB-20S05-10-5	□20	5	$\lambda/10$	<00'05"
OPB-20S05-4-5	□20	5	$\lambda/4$	<00'05"
OPB-20S05-1-5	□20	5	$\lambda$	<00'05"
OPB-20S05-P	□20	5	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

BK7/Square □25 – □50				
Part Number	Length A [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPB-25S01-1-5	□25	1	$\lambda$	<00'05"
OPB-25S01-P	□25	1	4 $\lambda^*$	<03'00"
OPB-25S02-1-5	□25	2	$\lambda$	<00'05"
OPB-25S02-P	□25	2	4 $\lambda^*$	<03'00"
OPB-25S03-10-5	□25	3	$\lambda/10$	<00'05"
OPB-25S03-4-5	□25	3	$\lambda/4$	<00'05"
OPB-25S03-1-5	□25	3	$\lambda$	<00'05"
OPB-25S03-P	□25	3	4 $\lambda^*$	<03'00"
OPB-25S05-20-2	□25	5	$\lambda/20$	<00'02"
OPB-25S05-10-5	□25	5	$\lambda/10$	<00'05"
OPB-25S05-4-5	□25	5	$\lambda/4$	<00'05"
OPB-25S05-1-5	□25	5	$\lambda$	<00'05"
OPB-25S05-P	□25	5	4 $\lambda^*$	<03'00"
OPB-30S01-1-5	□30	1	$\lambda$	<00'05"
OPB-30S01-P	□30	1	4 $\lambda^*$	<03'00"
OPB-30S02-1-5	□30	2	$\lambda$	<00'05"
OPB-30S02-P	□30	2	4 $\lambda^*$	<03'00"
OPB-30S03-10-5	□30	3	$\lambda/10$	<00'05"
OPB-30S03-4-5	□30	3	$\lambda/4$	<00'05"
OPB-30S03-1-5	□30	3	$\lambda$	<00'05"
OPB-30S03-P	□30	3	4 $\lambda^*$	<03'00"
OPB-30S05-20-2	□30	5	$\lambda/20$	<00'02"
OPB-30S05-10-5	□30	5	$\lambda/10$	<00'05"
OPB-30S05-4-5	□30	5	$\lambda/4$	<00'05"
OPB-30S05-1-5	□30	5	$\lambda$	<00'05"
OPB-30S05-P	□30	5	4 $\lambda^*$	<03'00"
OPB-40S02-1-5	□40	2	$\lambda$	<00'05"
OPB-40S02-P	□40	2	4 $\lambda^*$	<03'00"
OPB-40S03-1-5	□40	3	$\lambda$	<00'05"
OPB-40S03-P	□40	3	4 $\lambda^*$	<03'00"
OPB-40S04-10-5	□40	4	$\lambda/10$	<00'05"
OPB-40S04-4-5	□40	4	$\lambda/4$	<00'05"
OPB-40S04-1-5	□40	4	$\lambda$	<00'05"
OPB-40S04-P	□40	4	4 $\lambda^*$	<03'00"
OPB-40S06-20-2	□40	6	$\lambda/20$	<00'02"
OPB-40S06-10-5	□40	6	$\lambda/10$	<00'05"
OPB-40S06-4-5	□40	6	$\lambda/4$	<00'05"
OPB-40S06-1-5	□40	6	$\lambda$	<00'05"
OPB-40S06-P	□40	6	4 $\lambda^*$	<03'00"
OPB-50S02-1-5	□50	2	$\lambda$	<00'05"
OPB-50S02-P	□50	2	4 $\lambda^*$	<03'00"
OPB-50S03-1-5	□50	3	$\lambda$	<00'05"
OPB-50S03-P	□50	3	4 $\lambda^*$	<03'00"
OPB-50S05-10-5	□50	5	$\lambda/10$	<00'05"
OPB-50S05-4-5	□50	5	$\lambda/4$	<00'05"
OPB-50S05-1-5	□50	5	$\lambda$	<00'05"
OPB-50S05-P	□50	5	4 $\lambda^*$	<03'00"
OPB-50S08-20-2	□50	8	$\lambda/20$	<00'02"
OPB-50S08-10-5	□50	8	$\lambda/10$	<00'05"
OPB-50S08-4-5	□50	8	$\lambda/4$	<00'05"
OPB-50S08-1-5	□50	8	$\lambda$	<00'05"
OPB-50S08-P	□50	8	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

**Compatible Optic Mounts**

CHA-25, -60

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# Optical Parallels | OPB/OPSQ/OPSQK

Synthetic fused silica/Circle $\phi 10 - \phi 20$					
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism	
OPSQ-10C01-10-5	$\phi 10$	1	$\lambda/10$	$<00'05''$	
OPSQ-10C01-1-5	$\phi 10$	1	$\lambda$	$<00'05''$	
OPSQ-10C01-4-5	$\phi 10$	1	$\lambda/4$	$<00'05''$	
OPSQ-10C01-P	$\phi 10$	1	$4\lambda^*$	$<03'00''$	
OPSQ-10C02-20-2	$\phi 10$	2	$\lambda/20$	$<00'02''$	
OPSQ-10C02-10-5	$\phi 10$	2	$\lambda/10$	$<00'05''$	
OPSQ-10C02-4-5	$\phi 10$	2	$\lambda/4$	$<00'05''$	
OPSQ-10C02-1-5	$\phi 10$	2	$\lambda$	$<00'05''$	
OPSQ-10C02-P	$\phi 10$	2	$4\lambda^*$	$<03'00''$	
OPSQ-10C2.3-1-10	$\phi 10$	2.3	$\lambda$	$<00'10''$	
OPSQ-10C03-20-2	$\phi 10$	3	$\lambda/20$	$<00'02''$	
OPSQ-10C03-10-5	$\phi 10$	3	$\lambda/10$	$<00'05''$	
OPSQ-10C03-4-5	$\phi 10$	3	$\lambda/4$	$<00'05''$	
OPSQ-10C03-1-5	$\phi 10$	3	$\lambda$	$<00'05''$	
OPSQ-10C03-P	$\phi 10$	3	$4\lambda^*$	$<03'00''$	
OPSQ-10C05-20-2	$\phi 10$	5	$\lambda/20$	$<00'02''$	
OPSQ-10C05-10-5	$\phi 10$	5	$\lambda/10$	$<00'05''$	
OPSQ-10C05-4-5	$\phi 10$	5	$\lambda/4$	$<00'05''$	
OPSQ-10C05-1-5	$\phi 10$	5	$\lambda$	$<00'05''$	
OPSQ-10C05-P	$\phi 10$	5	$4\lambda^*$	$<03'00''$	
OPSQ-12.7C03-10-5	$\phi 12.7$	3	$\lambda/10$	$<00'05''$	
OPSQ-12.7C03-4-5	$\phi 12.7$	3	$\lambda/4$	$<00'05''$	
OPSQ-12.7C05-10-5	$\phi 12.7$	5	$\lambda/10$	$<00'05''$	
OPSQ-15C01-1-5	$\phi 15$	1	$\lambda$	$<00'05''$	
OPSQ-15C01-P	$\phi 15$	1	$4\lambda^*$	$<03'00''$	
OPSQ-15C02-10-5	$\phi 15$	2	$\lambda/10$	$<00'05''$	
OPSQ-15C02-4-5	$\phi 15$	2	$\lambda/4$	$<00'05''$	
OPSQ-15C02-1-5	$\phi 15$	2	$\lambda$	$<00'05''$	
OPSQ-15C02-P	$\phi 15$	2	$4\lambda^*$	$<03'00''$	
OPSQ-15C2.3-1-10	$\phi 15$	2.3	$\lambda$	$<00'10''$	
OPSQ-15C03-20-2	$\phi 15$	3	$\lambda/20$	$<00'02''$	
OPSQ-15C03-10-5	$\phi 15$	3	$\lambda/10$	$<00'05''$	
OPSQ-15C03-4-5	$\phi 15$	3	$\lambda/4$	$<00'05''$	
OPSQ-15C03-1-5	$\phi 15$	3	$\lambda$	$<00'05''$	
OPSQ-15C03-P	$\phi 15$	3	$4\lambda^*$	$<03'00''$	
OPSQ-15C05-20-2	$\phi 15$	5	$\lambda/20$	$<00'02''$	
OPSQ-15C05-10-5	$\phi 15$	5	$\lambda/10$	$<00'05''$	
OPSQ-15C05-4-5	$\phi 15$	5	$\lambda/4$	$<00'05''$	
OPSQ-15C05-1-5	$\phi 15$	5	$\lambda$	$<00'05''$	
OPSQ-15C05-P	$\phi 15$	5	$4\lambda^*$	$<03'00''$	
OPSQ-20C01-1-5	$\phi 20$	1	$\lambda$	$<00'05''$	
OPSQ-20C01-P	$\phi 20$	1	$4\lambda^*$	$<03'00''$	
OPSQ-20C02-10-5	$\phi 20$	2	$\lambda/10$	$<00'05''$	
OPSQ-20C02-4-5	$\phi 20$	2	$\lambda/4$	$<00'05''$	
OPSQ-20C02-1-5	$\phi 20$	2	$\lambda$	$<00'05''$	
OPSQ-20C02-P	$\phi 20$	2	$4\lambda^*$	$<03'00''$	
OPSQ-20C2.3-1-10	$\phi 20$	2.3	$\lambda$	$<00'10''$	
OPSQ-20C03-20-2	$\phi 20$	3	$\lambda/20$	$<00'02''$	
OPSQ-20C03-10-5	$\phi 20$	3	$\lambda/10$	$<00'05''$	
OPSQ-20C03-4-5	$\phi 20$	3	$\lambda/4$	$<00'05''$	
OPSQ-20C03-1-5	$\phi 20$	3	$\lambda$	$<00'05''$	
OPSQ-20C03-P	$\phi 20$	3	$4\lambda^*$	$<03'00''$	
OPSQ-20C05-20-2	$\phi 20$	5	$\lambda/20$	$<00'02''$	
OPSQ-20C05-10-5	$\phi 20$	5	$\lambda/10$	$<00'05''$	
OPSQ-20C05-4-5	$\phi 20$	5	$\lambda/4$	$<00'05''$	
OPSQ-20C05-1-5	$\phi 20$	5	$\lambda$	$<00'05''$	
OPSQ-20C05-P	$\phi 20$	5	$4\lambda^*$	$<03'00''$	

\*  $4\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

Synthetic fused silica/Circle $\phi 25 - \phi 40$					
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism	
OPSQ-25C01-1-5	$\phi 25$	1	$\lambda$	$<00'05''$	
OPSQ-25C01-P	$\phi 25$	1	$4\lambda^*$	$<03'00''$	
OPSQ-25C02-10-5	$\phi 25$	2	$\lambda/10$	$<00'05''$	
OPSQ-25C02-4-5	$\phi 25$	2	$\lambda/4$	$<00'05''$	
OPSQ-25C02-1-5	$\phi 25$	2	$\lambda$	$<00'05''$	
OPSQ-25C02-P	$\phi 25$	2	$4\lambda^*$	$<03'00''$	
OPSQ-25C2.3-0.5-10	$\phi 25$	2.3	$2\lambda$	$<00'10''$	
OPSQ-25C03-10-5	$\phi 25$	3	$\lambda/10$	$<00'05''$	
OPSQ-25C03-4-5	$\phi 25$	3	$\lambda/4$	$<00'05''$	
OPSQ-25C03-1-5	$\phi 25$	3	$\lambda$	$<00'05''$	
OPSQ-25C03-P	$\phi 25$	3	$4\lambda^*$	$<03'00''$	
OPSQ-25C05-20-2	$\phi 25$	5	$\lambda/20$	$<00'02''$	
OPSQ-25C05-10-5	$\phi 25$	5	$\lambda/10$	$<00'05''$	
OPSQ-25C05-4-5	$\phi 25$	5	$\lambda/4$	$<00'05''$	
OPSQ-25C05-1-5	$\phi 25$	5	$\lambda$	$<00'05''$	
OPSQ-25C05-P	$\phi 25$	5	$4\lambda^*$	$<03'00''$	
OPSQ-25.4C03-10-5	$\phi 25.4$	3	$\lambda/10$	$<00'05''$	
OPSQ-25.4C03-4-5	$\phi 25.4$	3	$\lambda/4$	$<00'05''$	
OPSQ-25.4C05-10-5	$\phi 25.4$	5	$\lambda/10$	$<00'05''$	
OPSQ-30C01-1-5	$\phi 30$	1	$\lambda$	$<00'05''$	
OPSQ-30C01-P	$\phi 30$	1	$4\lambda^*$	$<03'00''$	
OPSQ-30C02-10-5	$\phi 30$	2	$\lambda/10$	$<00'05''$	
OPSQ-30C02-4-5	$\phi 30$	2	$\lambda/4$	$<00'05''$	
OPSQ-30C02-1-5	$\phi 30$	2	$\lambda$	$<00'05''$	
OPSQ-30C02-P	$\phi 30$	2	$4\lambda^*$	$<03'00''$	
OPSQ-30C2.3-0.5-10	$\phi 30$	2.3	$2\lambda$	$<00'10''$	
OPSQ-30C03-10-5	$\phi 30$	3	$\lambda/10$	$<00'05''$	
OPSQ-30C03-4-5	$\phi 30$	3	$\lambda/4$	$<00'05''$	
OPSQ-30C03-1-5	$\phi 30$	3	$\lambda$	$<00'05''$	
OPSQ-30C03-P	$\phi 30$	3	$4\lambda^*$	$<03'00''$	
OPSQ-30C05-20-2	$\phi 30$	5	$\lambda/20$	$<00'02''$	
OPSQ-30C05-10-5	$\phi 30$	5	$\lambda/10$	$<00'05''$	
OPSQ-30C05-4-5	$\phi 30$	5	$\lambda/4$	$<00'05''$	
OPSQ-30C05-1-5	$\phi 30$	5	$\lambda$	$<00'05''$	
OPSQ-30C05-P	$\phi 30$	5	$4\lambda^*$	$<03'00''$	
OPSQ-40C01-1-5	$\phi 40$	1	$\lambda$	$<00'05''$	
OPSQ-40C01-P	$\phi 40$	1	$4\lambda^*$	$<03'00''$	
OPSQ-40C02-1-5	$\phi 40$	2	$\lambda$	$<00'05''$	
OPSQ-40C02-P	$\phi 40$	2	$4\lambda^*$	$<03'00''$	
OPSQ-40C2.3-0.25-10	$\phi 40$	2.3	$4\lambda$	$<00'10''$	
OPSQ-40C03-4-5	$\phi 40$	3	$\lambda/4$	$<00'05''$	
OPSQ-40C03-1-5	$\phi 40$	3	$\lambda$	$<00'05''$	
OPSQ-40C03-P	$\phi 40$	3	$4\lambda^*$	$<03'00''$	
OPSQ-40C04-10-5	$\phi 40$	4	$\lambda/10$	$<00'05''$	
OPSQ-40C04-4-5	$\phi 40$	4	$\lambda/4$	$<00'05''$	
OPSQ-40C04-1-5	$\phi 40$	4	$\lambda$	$<00'05''$	
OPSQ-40C04-P	$\phi 40$	4	$4\lambda^*$	$<03'00''$	
OPSQ-40C06-20-2	$\phi 40$	6	$\lambda/20$	$<00'02''$	
OPSQ-40C06-10-5	$\phi 40$	6	$\lambda/10$	$<00'05''$	
OPSQ-40C06-4-5	$\phi 40$	6	$\lambda/4$	$<00'05''$	
OPSQ-40C06-1-5	$\phi 40$	6	$\lambda$	$<00'05''$	
OPSQ-40C06-P	$\phi 40$	6	$4\lambda^*$	$<03'00''$	

\*  $4\lambda$  shows the surface flatness of the measurement area of  $\phi 30\text{mm}$ .

## Compatible Optic Mounts

MLH-10, -15 / BSHL-15-2, -20-2 / MHG-MP12.7-NL / MHG-HS25-NL, -HS30-NL / MHAN-40S



Synthetic fused silica/Circle $\phi 50 - \phi 80$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPSQ-50C01-1-5	$\phi 50$	1	$\lambda$	<00'05"
OPSQ-50C01-P	$\phi 50$	1	4 $\lambda^*$	<03'00"
OPSQ-50C02-1-5	$\phi 50$	2	$\lambda$	<00'05"
OPSQ-50C02-P	$\phi 50$	2	4 $\lambda^*$	<03'00"
OPSQ-50C2.3-0.25-10	$\phi 50$	2.3	4 $\lambda$	<00'10"
OPSQ-50C03-4-5	$\phi 50$	3	$\lambda/4$	<00'05"
OPSQ-50C03-1-5	$\phi 50$	3	$\lambda$	<00'05"
OPSQ-50C03-P	$\phi 50$	3	4 $\lambda^*$	<03'00"
OPSQ-50C05-10-5	$\phi 50$	5	$\lambda/10$	<00'05"
OPSQ-50C05-4-5	$\phi 50$	5	$\lambda/4$	<00'05"
OPSQ-50C05-1-5	$\phi 50$	5	$\lambda$	<00'05"
OPSQ-50C05-P	$\phi 50$	5	4 $\lambda^*$	<03'00"
OPSQ-50C08-20-2	$\phi 50$	8	$\lambda/20$	<00'02"
OPSQ-50C08-10-5	$\phi 50$	8	$\lambda/10$	<00'05"
OPSQ-50C08-4-5	$\phi 50$	8	$\lambda/4$	<00'05"
OPSQ-50C08-1-5	$\phi 50$	8	$\lambda$	<00'05"
OPSQ-50C08-P	$\phi 50$	8	4 $\lambda^*$	<03'00"
OPSQ-50.8C05-10-5	$\phi 50.8$	5	$\lambda/10$	<00'05"
OPSQ-50.8C05-4-5	$\phi 50.8$	5	$\lambda/4$	<00'05"
OPSQ-50.8C08-10-5	$\phi 50.8$	8	$\lambda/10$	<00'05"
OPSQ-60C2.3-0.25-10	$\phi 60$	2.3	4 $\lambda$	<00'10"
OPSQ-60C03-1-5	$\phi 60$	3	$\lambda$	<00'05"
OPSQ-60C03-P	$\phi 60$	3	4 $\lambda^*$	<03'00"
OPSQ-60C06-10-5	$\phi 60$	6	$\lambda/10$	<00'05"
OPSQ-60C06-4-5	$\phi 60$	6	$\lambda/4$	<00'05"
OPSQ-60C06-1-5	$\phi 60$	6	$\lambda$	<00'05"
OPSQ-60C06-P	$\phi 60$	6	4 $\lambda^*$	<03'00"
OPSQ-60C10-20-2	$\phi 60$	10	$\lambda/20$	<00'02"
OPSQ-60C10-10-5	$\phi 60$	10	$\lambda/10$	<00'05"
OPSQ-60C10-4-5	$\phi 60$	10	$\lambda/4$	<00'05"
OPSQ-60C10-1-5	$\phi 60$	10	$\lambda$	<00'05"
OPSQ-60C10-P	$\phi 60$	10	4 $\lambda^*$	<03'00"
OPSQ-70C2.3-0.2-10	$\phi 70$	2.3	5 $\lambda$	<00'10"
OPSQ-80C2.3-0.2-10	$\phi 80$	2.3	5 $\lambda$	<00'10"
OPSQ-80C08-10-5	$\phi 80$	8	$\lambda/10$	<00'05"
OPSQ-80C08-4-5	$\phi 80$	8	$\lambda/4$	<00'05"
OPSQ-80C08-1-5	$\phi 80$	8	$\lambda$	<00'05"
OPSQ-80C08-P	$\phi 80$	8	4 $\lambda^*$	<03'00"
OPSQ-80C12-20-2	$\phi 80$	12	$\lambda/20$	<00'02"
OPSQ-80C12-10-5	$\phi 80$	12	$\lambda/10$	<00'05"
OPSQ-80C12-4-5	$\phi 80$	12	$\lambda/4$	<00'05"
OPSQ-80C12-1-5	$\phi 80$	12	$\lambda$	<00'05"
OPSQ-80C12-P	$\phi 80$	12	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30$ mm.

Synthetic fused silica/Circle $\phi 100 - \phi 150$				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPSQ-100C2.3-0.1-10	$\phi 100$	2.3	10 $\lambda$	<00'10"
OPSQ-100C10-10-5	$\phi 100$	10	$\lambda/10$	<00'05"
OPSQ-100C10-4-5	$\phi 100$	10	$\lambda/4$	<00'05"
OPSQ-100C10-1-5	$\phi 100$	10	$\lambda$	<00'05"
OPSQ-100C10-P	$\phi 100$	10	4 $\lambda^*$	<03'00"
OPSQ-100C15-20-2	$\phi 100$	15	$\lambda/20$	<00'02"
OPSQ-100C15-10-5	$\phi 100$	15	$\lambda/10$	<00'05"
OPSQ-100C15-4-5	$\phi 100$	15	$\lambda/4$	<00'05"
OPSQ-100C15-1-5	$\phi 100$	15	$\lambda$	<00'05"
OPSQ-100C15-P	$\phi 100$	15	4 $\lambda^*$	<03'00"
OPSQ-120C2.3-0.1-10	$\phi 120$	2.3	10 $\lambda$	<00'10"
OPSQ-125C2.3-0.1-10	$\phi 125$	2.3	10 $\lambda$	<00'10"
OPSQ-130C13-10-5	$\phi 130$	13	$\lambda/10$	<00'05"
OPSQ-130C13-4-5	$\phi 130$	13	$\lambda/4$	<00'05"
OPSQ-130C13-1-5	$\phi 130$	13	$\lambda$	<00'05"
OPSQ-130C13-P	$\phi 130$	13	4 $\lambda^*$	<03'00"
OPSQ-130C18-10-5	$\phi 130$	18	$\lambda/10$	<00'05"
OPSQ-130C18-4-5	$\phi 130$	18	$\lambda/4$	<00'05"
OPSQ-130C18-1-5	$\phi 130$	18	$\lambda$	<00'05"
OPSQ-130C18-P	$\phi 130$	18	4 $\lambda^*$	<03'00"
OPSQ-150C15-10-5	$\phi 150$	15	$\lambda/10$	<00'05"
OPSQ-150C15-4-5	$\phi 150$	15	$\lambda/4$	<00'05"
OPSQ-150C15-1-5	$\phi 150$	15	$\lambda$	<00'05"
OPSQ-150C15-P	$\phi 150$	15	4 $\lambda^*$	<03'00"
OPSQ-150C20-10-5	$\phi 150$	20	$\lambda/10$	<00'05"
OPSQ-150C20-4-5	$\phi 150$	20	$\lambda/4$	<00'05"
OPSQ-150C20-1-5	$\phi 150$	20	$\lambda$	<00'05"
OPSQ-150C20-P	$\phi 150$	20	4 $\lambda^*$	<03'00"

\* 4 $\lambda$  shows the surface flatness of the measurement area of  $\phi 30$ mm.

Synthetic fused silica for excimer laser (248nm)				
Part Number	Diameter $\phi D$ [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPSQK-30C03-10-5	$\phi 30$	3	$\lambda/10$	<00'05"
OPSQK-30C05-10-5	$\phi 30$	5	$\lambda/10$	<00'05"
OPSQK-50C05-10-5	$\phi 50$	5	$\lambda/10$	<00'05"
OPSQK-50C08-10-5	$\phi 50$	8	$\lambda/10$	<00'05"

### Compatible Optic Mounts

MHG-MP50-NL, MP50.8-NL / MHG-60MAD+MHG-MP80-NL / MHG-MP80-NL, MP100-NL / MHA-130AS, -150S / MHG-MP30-NL / LHA-150

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Synthetic fused silica/Square □10 – □20				
Part Number	Length A [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPSQ-10S01-10-5	□10	1	λ/10	<00'05"
OPSQ-10S01-4-5	□10	1	λ/4	<00'05"
OPSQ-10S01-1-5	□10	1	λ	<00'05"
OPSQ-10S01-P	□10	1	4λ*	<03'00"
OPSQ-10S02-20-2	□10	2	λ/20	<00'02"
OPSQ-10S02-10-5	□10	2	λ/10	<00'05"
OPSQ-10S02-4-5	□10	2	λ/4	<00'05"
OPSQ-10S02-1-5	□10	2	λ	<00'05"
OPSQ-10S02-P	□10	2	4λ*	<03'00"
OPSQ-10S2.3-1-10	□10	2.3	λ	<00'10"
OPSQ-10S03-20-2	□10	3	λ/20	<00'02"
OPSQ-10S03-10-5	□10	3	λ/10	<00'05"
OPSQ-10S03-4-5	□10	3	λ/4	<00'05"
OPSQ-10S03-1-5	□10	3	λ	<00'05"
OPSQ-10S03-P	□10	3	4λ*	<03'00"
OPSQ-10S05-20-2	□10	5	λ/20	<00'02"
OPSQ-10S05-10-5	□10	5	λ/10	<00'05"
OPSQ-10S05-4-5	□10	5	λ/4	<00'05"
OPSQ-10S05-1-5	□10	5	λ	<00'05"
OPSQ-10S05-P	□10	5	4λ*	<03'00"
OPSQ-15S01-1-5	□15	1	λ	<00'05"
OPSQ-15S01-P	□15	1	4λ*	<03'00"
OPSQ-15S02-10-5	□15	2	λ/10	<00'05"
OPSQ-15S02-4-5	□15	2	λ/4	<00'05"
OPSQ-15S02-1-5	□15	2	λ	<00'05"
OPSQ-15S02-P	□15	2	4λ*	<03'00"
OPSQ-15S2.3-1-10	□15	2.3	λ	<00'10"
OPSQ-15S03-20-2	□15	3	λ/20	<00'02"
OPSQ-15S03-10-5	□15	3	λ/10	<00'05"
OPSQ-15S03-4-5	□15	3	λ/4	<00'05"
OPSQ-15S03-1-5	□15	3	λ	<00'05"
OPSQ-15S03-P	□15	3	4λ*	<03'00"
OPSQ-15S05-20-2	□15	5	λ/20	<00'02"
OPSQ-15S05-10-5	□15	5	λ/10	<00'05"
OPSQ-15S05-4-5	□15	5	λ/4	<00'05"
OPSQ-15S05-1-5	□15	5	λ	<00'05"
OPSQ-15S05-P	□15	5	4λ*	<03'00"
OPSQ-20S01-1-5	□20	1	λ	<00'05"
OPSQ-20S01-P	□20	1	4λ*	<03'00"
OPSQ-20S02-10-5	□20	2	λ/10	<00'05"
OPSQ-20S02-4-5	□20	2	λ/4	<00'05"
OPSQ-20S02-1-5	□20	2	λ	<00'05"
OPSQ-20S02-P	□20	2	4λ*	<03'00"
OPSQ-20S2.3-1-10	□20	2.3	λ	<00'10"
OPSQ-20S03-20-2	□20	3	λ/20	<00'02"
OPSQ-20S03-10-5	□20	3	λ/10	<00'05"
OPSQ-20S03-4-5	□20	3	λ/4	<00'05"
OPSQ-20S03-1-5	□20	3	λ	<00'05"
OPSQ-20S03-P	□20	3	4λ*	<03'00"
OPSQ-20S05-20-2	□20	5	λ/20	<00'02"
OPSQ-20S05-10-5	□20	5	λ/10	<00'05"
OPSQ-20S05-4-5	□20	5	λ/4	<00'05"
OPSQ-20S05-1-5	□20	5	λ	<00'05"
OPSQ-20S05-P	□20	5	4λ*	<03'00"

\* 4λ shows the surface flatness of the measurement area of φ30mm.

Synthetic fused silica/Square □25 – □126.6				
Part Number	Length A [mm]	Thickness t [mm]	Surface flatness	Parallelism
OPSQ-25S01-1-5	□25	1	λ	<00'05"
OPSQ-25S01-P	□25	1	4λ*	<03'00"
OPSQ-25S02-1-5	□25	2	λ	<00'05"
OPSQ-25S02-P	□25	2	4λ*	<03'00"
OPSQ-25S2.3-0.5-10	□25	2.3	2λ	<00'10"
OPSQ-25S03-10-5	□25	3	λ/10	<00'05"
OPSQ-25S03-4-5	□25	3	λ/4	<00'05"
OPSQ-25S03-1-5	□25	3	λ	<00'05"
OPSQ-25S03-P	□25	3	4λ*	<03'00"
OPSQ-25S05-20-2	□25	5	λ/20	<00'02"
OPSQ-25S05-10-5	□25	5	λ/10	<00'05"
OPSQ-25S05-4-5	□25	5	λ/4	<00'05"
OPSQ-25S05-1-5	□25	5	λ	<00'05"
OPSQ-25S05-P	□25	5	4λ*	<03'00"
OPSQ-30S01-1-5	□30	1	λ	<00'05"
OPSQ-30S01-P	□30	1	4λ*	<03'00"
OPSQ-30S02-1-5	□30	2	λ	<00'05"
OPSQ-30S02-P	□30	2	4λ*	<03'00"
OPSQ-30S2.3-0.5-10	□30	2.3	2λ	<00'10"
OPSQ-30S03-10-5	□30	3	λ/10	<00'05"
OPSQ-30S03-4-5	□30	3	λ/4	<00'05"
OPSQ-30S03-1-5	□30	3	λ	<00'05"
OPSQ-30S03-P	□30	3	4λ*	<03'00"
OPSQ-30S05-20-2	□30	5	λ/20	<00'02"
OPSQ-30S05-10-5	□30	5	λ/10	<00'05"
OPSQ-30S05-4-5	□30	5	λ/4	<00'05"
OPSQ-30S05-1-5	□30	5	λ	<00'05"
OPSQ-30S05-P	□30	5	4λ*	<03'00"
OPSQ-40S02-1-5	□40	2	λ	<00'05"
OPSQ-40S02-P	□40	2	4λ*	<03'00"
OPSQ-40S2.3-0.25-10	□40	2.3	4λ	<00'10"
OPSQ-40S03-1-5	□40	3	λ	<00'05"
OPSQ-40S03-P	□40	3	4λ*	<03'00"
OPSQ-40S04-10-5	□40	4	λ/10	<00'05"
OPSQ-40S04-4-5	□40	4	λ/4	<00'05"
OPSQ-40S04-1-5	□40	4	λ	<00'05"
OPSQ-40S04-P	□40	4	4λ*	<03'00"
OPSQ-40S06-20-2	□40	6	λ/20	<00'02"
OPSQ-40S06-10-5	□40	6	λ/10	<00'05"
OPSQ-40S06-4-5	□40	6	λ/4	<00'05"
OPSQ-40S06-1-5	□40	6	λ	<00'05"
OPSQ-40S06-P	□40	6	4λ*	<03'00"
OPSQ-50S02-1-5	□50	2	λ	<00'05"
OPSQ-50S02-P	□50	2	4λ*	<03'00"
OPSQ-50S2.3-0.25-10	□50	2.3	4λ	<00'10"
OPSQ-50S03-1-5	□50	3	λ	<00'05"
OPSQ-50S03-P	□50	3	4λ*	<03'00"
OPSQ-50S05-10-5	□50	5	λ/10	<00'05"
OPSQ-50S05-4-5	□50	5	λ/4	<00'05"
OPSQ-50S05-1-5	□50	5	λ	<00'05"
OPSQ-50S05-P	□50	5	4λ*	<03'00"
OPSQ-50S08-20-2	□50	8	λ/20	<00'02"
OPSQ-50S08-10-5	□50	8	λ/10	<00'05"
OPSQ-50S08-4-5	□50	8	λ/4	<00'05"
OPSQ-50S08-1-5	□50	8	λ	<00'05"
OPSQ-50S08-P	□50	8	4λ*	<03'00"
OPSQ-60S2.3-0.25-10	□60	2.3	4λ	<00'10"
OPSQ-70S2.3-0.2-10	□70	2.3	5λ	<00'10"
OPSQ-80S2.3-0.2-10	□80	2.3	5λ	<00'10"
OPSQ-100S2.3-0.1-10	□100	2.3	10λ	<00'10"
OPSQ-120S2.3-0.1-10	□120	2.3	10λ	<00'10"
OPSQ-127S2.3-0.1-10	□126.6	2.3	10λ	<00'10"

\* 4λ shows the surface flatness of the measurement area of φ30mm.

**Compatible Optic Mounts**

CHA-25, -60, -130