

Precision Optics

Material: BK7 grade A optical glass Design Wavelength: 546.1 nm Design Index: 1.5183 ±0.0005

Precision Optics

design and manufacture of precisio

Coated Laser Crystal

is capable of supplying a large qu

Standard Product

Crystals	Doping	Size(mm 3)	Coating
Nd:YVO 4	1 %	3x3x 2	Coated for 1064 nm, 532 nm, 1342 n
0.5%	3x3x5		
Nd:YAG	1%	3x3x 2	Coated for 1064 nm, 532 nm, 946 nm
1%	3x3x 3		

Standard Product

Wavelength	Size	Coating
473 nm OC	ø 4 mm, R=50/100/200 mm	Plano-Concave, HR946 nm, HT473nm
532 nm OC	ø 4 mm, R=50/100/200 mm	Plano-Concave, HR1064 nm, HT532nm
671 nm OC	ø 4 mm, R=50/200 mm	Plano-Concave, HR1342 nm, HT671nm
1064 nm OC	ø 4 mm, R=50/100/200 mm	Plano-Concave, PR1064nm

Frequency Doubling Crystal

Frequency Doubler or Second Harmon

Standard Product

Crystals	Size(mm 3)	Coating
LBO	2x2x5	AR@1064nm&532nm /946nm&473nm/1342n
2x2x 10		
KTP	2x2x5	AR@1064nm&532nm
2x2x9		
BBO	2x2x5	AR@1064nm /532nm/266nm
2x2x 10		

Lens	Part No.	Illustration	Property and Application
Plano-Convex Lens	L01	Positive focus length. Suitable wh	
Double-Concave Lens	L02	Negative lens with the form suited	
Plano-Concave Lens	L03	Negative lens with the form suitab	

Substrate Mat erial

BK7 or B270

Wavelength range

400-700 nm

Dimension

12.7mm/ 25.4mm

Extinction Ratio

>1000:1

Type

Feature

Zero Order

Cemented

Cemented by glue Better Temperatur

Optical Contacted

No glue Better Temperature Bandwid

Air Spaced

No glue, Mounted Better Temperatur

True Zero Order

Cemented

Cemented by glue Better Temperatur

Single Plate		Single plate Better Temperature Ba		
Multi Order		Low Temperature Bandwidth Low Wave		
Material:		Crystal Quartz		
Dimension allowance		+0.0, -0.15mm		
Phase contrast Retardation		·/8,·/4,·/2, or discrecional		
Wavefront distortion		·-/4@632.8nm barring Cemented Wave		
Retardation tolerance		·-/300 ·-/500		
Wavelength range		260-1600 nm		
Parallelism		·1 arc second		
Surface quality		20/10 scratches and dig		
Clear aperture		·90%		
AR coating		R-0.25% at central wavelength		
Order of Waveplate	Multi	Low	Cemented Zero	Cemented Broad-band Zero
Total Thickness (mm)	~1	·0.5	1.5~2	1.5~3
Spectral Bandwidth (nm)	0.5	1.5	30	110
Item No.	Dia.(mm)	Wavelength	OD	Thickness
HWPZ-445-12	12.7mm	445nm	1.0"	0.7mm
HWPZ-457- 12	12.7mm	457nm	1.0"	0.7mm
HWPZ-473- 12	12.7mm	473nm	1.0"	0.7mm
HWPZ-532- 12	12.7mm	532nm	1.0"	0.7mm
HWPZ-589- 12	12.7mm	589nm	1.0"	0.7mm
HWPZ-638- 12	12.7mm	638nm	1.0"	0.7mm
HWPZ-671- 12	12.7mm	671nm	1.0"	0.7mm
HWPZ-914- 12	12.7mm	914nm	1.0"	0.7mm
HWPZ-946- 12	12.7mm	946nm	1.0"	0.7mm
HWPZ-1064- 12	12.7mm	1064nm	1.0"	0.7mm
HWPZ-1122- 12	12.7mm	1122nm	1.0"	0.7mm
HWPZ-1342- 12	12.7mm	1342nm	1.0"	0.7mm
Part No.	Full fan Angle (·°)		Material	
LG##	7°, 10°, 30°, 45°, 60°, 75°, 90°		BK7	
Material		BK7grade A optical glass, Fused si		
T/R:		50/50±5 · for specified wavelength		
Incidence Angle:		0°±2°		
Beam Deviation:		0°±3'(T) 0°±5'(R)		
Coatings:		dichroic multiplayer beamsplitter		
Surface Flatness:		0.3-3		
Surface Quality:		20/10 to 80/50		
Clear Aperture:		> 90% dimension		
Application:		Spectrophotometer, interferometer,		
Dimension, T/R, incident angle, wa				
Narrow Band		532, 632.8, 780, 850, 1064, 1550nm		
Broad Band		450-650, 650-900, 900-1200nm		



Standard Product

No	A (mm)	B (mm)	C (mm)	D	E	Material
1	26 ±0.2	4.6 ±0.2	1.8 ±0.2	¢22	¢33-0.1	H-K9L (or H-BaK7)
2	24 ±0.1	4 ±0.05	1.15 ±0.2	¢22	¢34-0.1	

No	A (mm)	B (mm)	C (mm)	PV Value	Material
1	5.0±0.1	5.0±0.1	0.7 ±0.1	<0.02 (Test by ZRGO Test apparatus)	Coating: SiO ₂ (532nm±0.5nm) H-K9L Soda Lime
2	2 0±0.1	2 0±0.1	1 ±0.02		
3	8 0±0.1	8 0±0.1	(0.5,0.7,1.0,1.5,1.7,2.0,3.0mm) ±0		
4	76 ±0.1	76 ±0.1	(0.8,1.0,1.5,2.0,2.5mm) ±0.03		
5	6 0±0.1	6 0±0.1	5.6 ±0.03	2.02	808nm ±45: R·98% H-K9L
6	11.6 ±0.1	11.6 ±0.1	2.2 ±0.03	AR	ZAB25
7	5.2 ±0.05	5.2±0.05	1 ±0.03	0.02	Coating MgF2 Quartz glass