



IR 抛光氟化钙 CaF_2 平凸正透镜 (直径 18.5mm 焦距 26mm)



描述

氟化钙在紫外到中红外 (250nm~7um) 之间都有很高的透射率, 所以广泛被用于制造棱镜, 透镜, 窗片, 氟化钙透镜具有低折射率, 高激光损伤阈值, 低同轴与径向应力双折射特性, 适合于准分子激光器使用, 或者集成于红外系统上。且氟化钙也备有低可溶性, 也可抵抗恶劣环境。氟化钙的抛光面可以工作数年之久, 氟化钙的硬度是氟化钡的两倍, 而且抗热冲击能力更强。

产品特点

透射波长范围广, 低折射率, 高透射率, 高损伤阈值, 低可溶性

产品型号

CAF18.5LENS26





应用领域

中红外QCL激光器

中红外激光光路搭建

核心参数

规格尺寸	焦距F.L.	曲率	透镜等级
18.5mm	26mm @ 3μm	12.6(±2%)	IR平凸

详细参数

名称	参数
透射范围	0.13~10um
折射率	1.39908 at 5um
反射损耗	5.4% at 5um
吸收系数	$7.8 \times 10^{-4} \text{cm}^{-1}$ @2.7um
吸收峰	35um
dn/dT	$-10.6 \times 10^{-6}/^{\circ}\text{C}$
dn/du=0	dn/du=0
密度	3.18g/cc



熔点	1360℃
导热率	9.71Wm ⁻¹ K ⁻¹
热膨胀	18.85×10 ⁻⁶ /℃
硬度	Knoop 158.3
比热容	854J Kg ⁻¹ K ⁻¹
介电常数	6.76 at 1MHz
杨氏模量	75.8GPa
剪切模量	33.77GPa
体积模量	82.71GPa
弹性系数	C ₁₁ =164 ,C ₁₂ =53 ,C ₄₄ =33.7
表现弹性极限	36.54MPa
泊松比	0.26
溶解度	0.0017g/100g with, 20 °C
分子量	78.08

类型/结构	立方裂解
反射损耗	5.4% at 5um

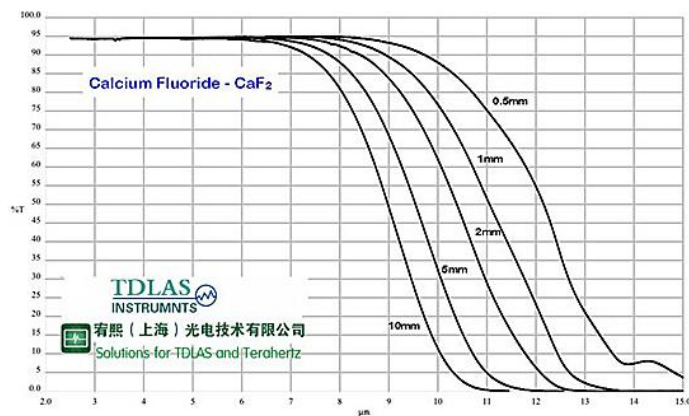
折射率:(No=Ordinary Ray 普通射线)

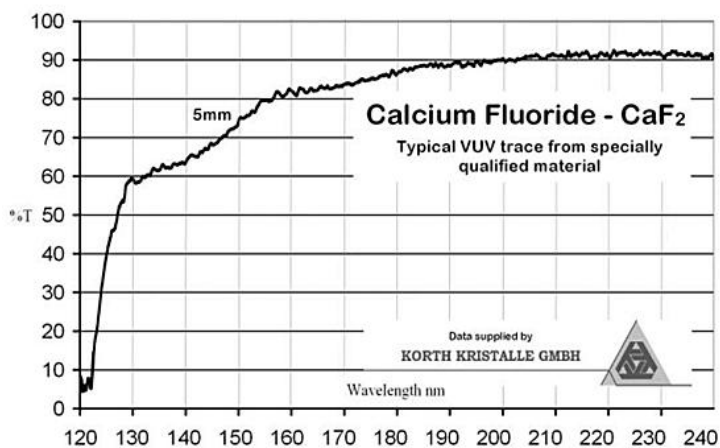
um	No	um	No	um	No
0.54	2.6754	0.58	2.6312	0.62	2.5994
0.66	2.5755	0.7	2.5568	0.74	2.5418
0.78	2.5295	0.82	2.5193	0.86	2.5107
0.90	2.5034	0.94	2.4971	0.98	2.4916
1.0	2.4892	1.4	2.4609	1.8	2.4496
2.2	2.4437	2.6	2.4401	3.0	2.4376
3.4	2.4356	3.8	2.4339	4.2	2.4324
4.6	2.4309	5.0	2.4295	5.4	2.4281
5.8	2.4266	6.2	2.4251	6.6	2.4235
7.0	2.4218	7.4	2.4201	7.8	2.4183

8.2	2.4163	8.6	2.4143	9.0	2.4122
9.4	2.4100	9.8	2.4077	10.2	2.4053
10.6	2.4028	11.0	2.4001	11.4	2.3974
11.8	2.3945	12.2	2.3915	12.6	2.3883
13.0	2.3850	13.4	2.3816	13.8	2.3781
14.2	2.3744	14.6	2.3705	15.0	2.3665
15.4	2.3623	15.8	2.3579	16.2	2.3534
16.6	2.3487	17.0	2.3438	17.4	2.3387
17.8	2.3333	18.2	2.3278		

特性曲线

光谱透射图





订购信息

订购型号	规格	曲率	焦距	CaF2 等级	参数
CAF12.7L ENS10U	12.7mm Ø	10.16 (±2%)	10mm @ 300nm	UV 双凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 300mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 2.6mm (±0.1mm) Radius of Curvature 1: 120 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L.277mm280mm287mm300mm Back F.L.276mm278mm286mm299mm Wavelength0.633µm1.064µm3.0µm5.0µm Parallel F.L. Tolerances ±2% to nearest mm. EFL from first lens formula. BFL is referenced from the lens surface.
CAF12.7L ENS12	12.7mm Ø	12.0 (±2%)	12.7mm @ 5µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 12.7mm Ø X 12.7mm F.L. @ 0.633µm MATERIAL: IR Grade CaF₂ Diameter: 12.7mm (+0.0/-0.127mm) Centre Thickness: 6.0mm (±0.127mm) Radius of Curvature 1: 12.0 (±2%) Radius of Curvature 2: 12.0 (±2%) S/D: 60/40 Edge thickness: 1.5mm (derived) Effective F.L.15.0mm15.5mm16.2mm Back F.L.12.7mm13.2mm13.9mm Wavelength0.633µm3.0µm5.0µm Parallel F.L. Tolerances ±2% to nearest mm. EFL from first lens formula. BFL is referenced from the lens surface.
CAF12.7L ENS12U	12.7mm Ø	12.0 (±2%)	12mm @ 300nm	UV 双凸	

CAF12.7L ENS100	12.7mm Ø	40.32 (±2%)	100mm @ 5µm	IR 平凸	CALCIUM FLUORIDE BI-CONVEX LENS 25mm Ø X 100mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 4.0mm (±0.1mm) Radius of Curvature 1: 78.94 (±2%) Radius of Curvature 2: 78.94 (±2%) S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 92mm 90mm 0.633µm 93mm 91mm 1.064µm 95mm 94mm 3.0µm 100mm 98mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.
CAF16LE NS90	16.0mm Ø	73.90 (±2%)	90mm @ 3µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 16mm Ø X 90mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 16.0mm (±0.1mm) Centre Thickness: 3.0mm (±0.1mm) Radius of Curvature 1: 73.90 (±2%) Radius of Curvature 2: 73.90 (±2%) S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 86mm 85mm 0.633µm 86mm 85mm 1.064µm 88mm 88mm 3.0µm 93mm 92mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.
CAF18.5L ENS26	18.5mm Ø	12.6 (±2%)	26mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 18.5mm Ø X 26mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 18.7mm (±0.25mm) Centre Thickness: 5.0mm (±0.2mm) Centration 3 Arc Minutes Radius of Curvature 1: 12.6 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.0mm (derived) Effective F.L. Back F.L. Wavelength 29.1mm 25.6mm 0.633µm 30.2mm 26.6mm 3.0µm 31.6mm 28.0mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.
CAF20LE NS50	20mm Ø	19.95 (±2%)	50mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 20mm Ø x 50mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 20.0mm (±0.1mm) Centre Thickness: 4.0mm (±0.1mm) Radius of Curvature 1: 19.95 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.3mm (derived) Effective F.L. Back F.L. Wavelength 46mm 43mm 0.633µm 47mm 44mm 1.064µm 48mm 45mm 3.0µm 50mm 47mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.

CAF25LE NS25U	25mm Ø	21.53 (±2%)	25mm @ 350nm	UV 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 25mm Ø X 25mm F.L. @ 0.35µm MATERIAL: UV Grade CaF₂ Diameter: 25.0mm (+0.0/-0.1mm) Centre Thickness: 10mm (±0.1mm) Radius of Curvature 1: 21.53 (±2%) Radius of Curvature 2: 21.53 (±2%) SID: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 25.9mm Pr. Plane F.L. 25.0mm Back F.L. 22.2mm Wavelength 0.35µm 26.8mm 23.0mm 0.633µm 28.0mm Paraxial F.L. Tolerances ±0% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.
CAF25LE NS25	25mm Ø	20.80 (±2%)	25.4mm @ 3µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 25mm Ø X 25.4mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (+0.0/-0.1mm) Centre Thickness: 10mm (±0.1mm) Radius of Curvature 1: 20.80 (±2%) Radius of Curvature 2: 20.80 (±2%) SID: 60/40 Edge thickness: 1.6mm (derived) Effective F.L. 25.9mm Pr. Plane F.L. 25.4mm Back F.L. 22.2mm Wavelength 0.633µm 26.2mm 23.0mm 1.064µm 26.8mm 24.1mm 3.0µm 28.0mm 5.0µm Paraxial F.L. Tolerances ±0% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.
CAF25LE NS50B	25mm Ø	39.1 (±2%)	50mm @ 5µm	IR 双凸	
CAF25LE NS50	25mm Ø	20.9 (±2%)	50mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø x 50mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 6.1mm (±0.1mm) Radius of Curvature 1: 20.9 (±2%) Radius of Curvature 2: Plano SID: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 48mm Back F.L. 44mm Wavelength 0.633µm 49mm 45mm 1.064µm 50mm 45mm 3.0µm 52mm 48mm 5.0µm Paraxial F.L. Tolerances ±0% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.
CAF25LE NS50U	25mm Ø	22.96 (±2%)	50mm @ 350nm	UV 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø x 50mm F.L. @ 0.35µm MATERIAL: UV Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 5.7mm (±0.1mm) Radius of Curvature 1: 22.96mm (±2%) Radius of Curvature 2: Plano SID: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 51mm Back F.L. 47mm Wavelength 0.35 µm 53mm 49mm 0.633µm 54mm 49mm 1.064µm 55mm 51mm 3.0µm 57mm 53mm 5.0µm Paraxial F.L. Tolerances ±0% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.

CAF25LE NS75	25mm Ø	31.35 (±2%)	75mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø x 75mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:4.6mm (±0.1mm) Radius of Curvature 1:31.35 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:2.0mm (derived) Effective F.L.72mm Back F.L.69mm Wavelength0.633µm 73mm 70mm 1.064µm 75mm 72mm 3.0µm 78mm 75mm 5.0µm Parallel F.L. Tolerances ±0% to repeat min. EFL from this lens formula. BFL is referenced from the back lens surface.
CAF25LE NS100B	25mm Ø	78.94 (±2%)	100mm @ 3µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 25mm Ø X 100mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:4.0mm (±0.1mm) Radius of Curvature 1:78.94 (±2%) Radius of Curvature 2:78.94 (±2%) S/D:60/40 Edge thickness:2.0mm (derived) Effective F.L.92mm Back F.L.90mm Wavelength0.633µm 93mm 91mm 1.064µm 95mm 94mm 3.0µm 100mm 98mm 5.0µm Parallel F.L. Tolerances ±0% to repeat min. EFL from this lens formula. BFL is referenced from the lens surface.
CAF25LE NS100	25mm Ø	43.73 (±2%)	100mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 50mm Ø X 100mm F.L. @ 1µm MATERIAL: IR Grade CaF₂ Diameter:50.0mm (±0.1mm) Centre Thickness:10.0mm (±0.1mm) Radius of Curvature 1:43.0 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:2.0mm (derived) Effective F.L.99mm Back F.L.92mm Wavelength0.633µm 100mm 93mm 1.064µm 103mm 96mm 3.0µm 108mm 101mm 5.0µm Parallel F.L. Tolerances ±0% to repeat min. EFL from this lens formula. BFL is referenced from the lens surface.
CAF25LE NS100U	25mm Ø	43.73 (±2%)	100mm @ 350nm	UV 平凸	
CAF25LE NS130	25mm Ø	55.35 (±2%)	130mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 130mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:3.0mm (±0.1mm) Radius of Curvature 1:55.35 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:1.5mm (derived) Effective F.L.128mm Back F.L.126mm Wavelength0.633µm 129mm 126mm 1.064µm 133mm 130mm 3.0µm 139mm 136mm 5.0µm Parallel F.L. Tolerances ±0% to repeat min. EFL from this lens formula. BFL is referenced from the lens surface.

CAF25LE NS150	25mm Ø	61.0 (±2%)	150mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 150mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 3.3mm (±0.1mm) Radius of Curvature 1: 61.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 141mm 139mm 0.633µm 142mm 140mm 1.064µm 146mm 144mm 3.0µm 152mm 150mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm D.F.L. from this lens formula. D.F.L. is referenced from the lens surface.
CAF25LE NS150U	25mm Ø	69.75 (±2%)	150mm @ 350nm	UV 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 150mm F.L. @ 350nm MATERIAL: UV Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 3.1mm (±0.1mm) Radius of Curvature 1: 69.75 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 156mm 154mm 0.350µm 161mm 159mm 0.633µm 163mm 161mm 1.064µm 167mm 165mm 3.0µm 175mm 173mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm D.F.L. from this lens formula. D.F.L. is referenced from the lens surface.
CAF25LE NS200U	25mm Ø	90.39 (±2%)	200mm @ 350nm	UV 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 200mm F.L. @ 350nm MATERIAL: UV Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 2.9mm (±0.1mm) Radius of Curvature 1: 90.39 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 202mm 200mm 0.350µm 209mm 207mm 0.633µm 210mm 209mm 1.064µm 217mm 214mm 3.0µm 226mm 224mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm D.F.L. from this lens formula. D.F.L. is referenced from the lens surface.
CAF25LE NS300	25mm Ø	120.0 (±2%)	300mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 300mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 2.6mm (±0.1mm) Radius of Curvature 1: 120 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. Back F.L. Wavelength 277mm 276mm 0.633µm 280mm 278mm 1.064µm 287mm 286mm 3.0µm 300mm 299mm 5.0µm Paraxial F.L. Tolerance: ±2% to nearest mm D.F.L. from this lens formula. D.F.L. is referenced from the lens surface.

CAF25LE NS500	25mm Ø	202.02 (±2%)	500mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25mm Ø X 500mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.0mm (±0.1mm) Centre Thickness: 2.4mm (±0.1mm) Radius of Curvature 1: 202 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 467mm 471mm 483mm 506mm Back F.L. 465mm 469mm 482mm 504mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from the lens formula. BFL is referenced from the lens surface.
CAF25.4L ENS200	25.4mm Ø	80.7 (±2%)	200mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 25.4mm Ø X 200mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 25.4mm (+0.0 / -0.127mm) Centre Thickness: 2.64mm (±0.127mm) Radius of Curvature 1: 80.7 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.65mm (derived) Effective F.L. 187mm 188mm 193mm 202mm Back F.L. 185mm 186mm 191mm 200mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from the lens formula. BFL is referenced from the lens surface.
CAF27LE NS50	27mm Ø	43.10 (±2%)	50mm @ 3µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 27mm Ø X 50mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 27.0mm (±0.1mm) Centre Thickness: 6.4mm (±0.1mm) Radius of Curvature 1: 43.10 (±2%) Radius of Curvature 2: 43.10 (±2%) S/D: 60/40 Edge thickness: 2.1mm (derived) Effective F.L. 51mm 51mm 53mm 55mm Back F.L. 48.7mm 49.2mm 50.5mm 52.8mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from the lens formula. BFL is referenced from the lens surface.
CAF30LE NS70	30mm Ø	57.00 (±2%)	70mm @ 4µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 30mm Ø X 70mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 30.0mm (±0.1mm) Centre Thickness: 6.0mm (±0.1mm) Radius of Curvature 1: 57.0 (±2%) Radius of Curvature 2: 57.0 (±2%) S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 67mm 67mm 69mm 72mm Back F.L. 65mm 65mm 67mm 70mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from the lens formula. BFL is referenced from the lens surface.

CAF31.5L ENS60	31.5mm Ø	27.50 (±2%)	60mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 31.5mm Ø X 60mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 31.5mm (±0.1mm) Centre Thickness: 6.8mm (±0.1mm) Radius of Curvature 1: 27.5 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.8mm (derived) Effective F.L. 64mm 64mm 65mm 68mm Back F.L. 59mm 59mm 61mm 64mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerances: ±2% to nearest mm. D.F.L. from this lens formula. B.F.L. is referenced from the lens surface.
CAF38.1L ENS75	38.1mm Ø	33.84 (±2%)	75mm @ 4.5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 38.1mm Ø X 75mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 38.1mm (±0.1mm) Centre Thickness: 9.0mm (±0.1mm) Radius of Curvature 1: 33.84 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 3.1mm (derived) Effective F.L. 78mm 79mm 81mm 85mm Back F.L. 72mm 73mm 75mm 78mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerances: ±2% to nearest mm. D.F.L. from this lens formula. B.F.L. is referenced from the lens surface.
CAF38.1L ENS75U	38.1mm Ø	33.84 (±2%)	66mm @ 248nm	UV 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 38.1mm Ø X 75mm F.L. @ 3µm* MATERIAL: UV Grade CaF₂ Diameter: 38.1mm (±0.1mm) Centre Thickness: 9.0mm (±0.1mm) Radius of Curvature 1: 33.84 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 3.1mm (derived) Effective F.L. 72mm 78mm 79mm 81mm 85mm Back F.L. 66mm 72mm 73mm 75mm 78mm Wavelength 0.248µm 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerances: ±2% to nearest mm. D.F.L. from this lens formula. B.F.L. is referenced from the lens surface.
CAF38.1L ENS160	38.1mm Ø	68.16 (±2%)	160mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 38.1mm Ø X 160mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 38.1mm (+0.1 / -0.2mm) Centre Thickness: 4.5mm (±0.1mm) Radius of Curvature 1: 68.16 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.8mm (derived) Effective F.L. 157mm 159mm 163mm 171mm Back F.L. 154mm 156mm 160mm 167mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerances: ±2% to nearest mm. D.F.L. from this lens formula. B.F.L. is referenced from the lens surface.

CAF38.1L ENS250U	38.1mm Ø	100 (±2%)	215mm @ 248nm	UV 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 38.1mm Ø X 250mm F.L. @ 5µm MATERIAL: UV Grade CaF₂ Diameter: 38.1mm (±0.1mm) Centre Thickness: 3.8mm (±0.1mm) Radius of Curvature 1: 100.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 213mm 231mm 233mm 240mm 250mm Back F.L. 211mm 229mm 231mm 237mm 247mm Wavelength 0.248µm 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerance: ±0.5% to nearest mm EFL from thin lens formula. BFL is referenced from front lens surface.
CAF38.1L ENS475	38.1mm Ø	190.35 (±2%)	475mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 38.1mm Ø X 475mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 38.1mm (+0.05 / -0.0mm) Centre Thickness: 4.0mm (±0.1mm) Radius of Curvature 1: 190.35 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 3.0mm (derived) Effective F.L. 440mm 444mm 456mm 477mm Back F.L. 437mm 442mm 453mm 474mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerance: ±0.5% to nearest mm EFL from thin lens formula. BFL is referenced from front lens surface.
CAF40LE NS120	40mm Ø	50.25 (±2%)	120mm @ 3µm	UV 平凸	
CAF40LE NS150	40mm Ø	64 (±2%)	150mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 40mm Ø X 150mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 40.0mm (±0.1mm) Centre Thickness: 4.1mm (±0.1mm) Radius of Curvature 1: 64.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.0mm (derived) Effective F.L. 148mm 149mm 153mm 160mm Back F.L. 145mm 146mm 150mm 157mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerance: ±0.5% to nearest mm EFL from thin lens formula. BFL is referenced from front lens surface.
CAF40LE NS200	40mm Ø	85 (±2%)	200mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 40mm Ø X 200mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 40.0mm (±0.1mm) Centre Thickness: 3.3mm (±0.1mm) Radius of Curvature 1: 85.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.0mm (derived) Effective F.L. 196mm 198mm 203mm 212mm Back F.L. 194mm 196mm 201mm 210mm Wavelength 0.633µm 1.064µm 3.0µm 5.0µm Parallel F.L. Tolerance: ±0.5% to nearest mm EFL from thin lens formula. BFL is referenced from front lens surface.

CAF40LE NS330	40mm Ø	138 (±2%)	330mm @ 3µm	IR 平凸	
CAF40LE NS440	40mm Ø	187 (±2%)	440mm @ 3µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 40mm Ø X 440mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter: 40.0mm (±0.1mm) Centre Thickness: 2.0mm (±0.1mm) Radius of Curvature 1: 187.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 1.0mm (derived) Effective F.L. 432mm Back F.L. 431mm Wavelength 0.633µm 436mm 435mm 1.064µm 448mm 446mm 3.0µm 468mm 467mm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF50LE NS80	50mm Ø	65.6 (±2%)	80mm @ 5µm	IR 平凸	CALCIUM FLUORIDE BI-CONVEX LENS 50mm Ø X 80mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 50.0mm (±0.1mm) Centre Thickness: 19.9mm (±0.1mm) Radius of Curvature 1: 65.6 (±2%) Radius of Curvature 2: 65.6 (±2%) S/D: 60/40 Edge thickness: 10mm (derived) Effective F.L. 79mm Back F.L. 72mm Wavelength 0.633µm 80mm 73mm 1.064µm 82mm 75mm 3.0µm 86mm 78mm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF50LE NS100	50mm Ø	43.0 (±2%)	100mm @ 1µm	IR 双凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 50mm Ø X 100mm F.L. @ 1µm MATERIAL: IR Grade CaF₂ Diameter: 50.0mm (±0.1mm) Centre Thickness: 10.0mm (±0.1mm) Radius of Curvature 1: 43.0 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. 99mm Back F.L. 92mm Wavelength 0.633µm 100mm 93mm 1.064µm 103mm 96mm 3.0µm 108mm 101mm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF50LE NS135	50mm Ø	57.0 (±2%)	135mm @ 5µm	IR 平凸	CALCIUM FLUORIDE PLANO-CONVEX LENS 50mm Ø X 135mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 50.0mm (±0.1mm) Centre Thickness: 7.8mm (±0.1mm) Radius of Curvature 1: 57 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2mm (derived) Effective F.L. 132mm Back F.L. 126mm Wavelength 0.633µm 133mm 128mm 1.064µm 136mm 131mm 3.0µm 143mm 137mm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF50LE NS250	50mm Ø	198.9 (±2%)	250mm @ 5µm	IR 双凸	CALCIUM FLUORIDE BI-CONVEX LENS 50mm Ø X 250mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter: 50.0mm (±0.1mm) Centre Thickness: 6.2mm (±0.1mm) Radius of Curvature 1: 198.9 (±2%) Radius of Curvature 2: 198.9 (±2%) S/D: 60/40 Edge thickness: 3mm (derived) <table><tr><th>Effective F.L.</th><th>Back F.L.</th><th>Wavelength</th></tr><tr><td>231mm</td><td>229mm</td><td>0.633µm</td></tr><tr><td>233mm</td><td>231mm</td><td>1.064µm</td></tr><tr><td>239mm</td><td>237mm</td><td>3.0µm</td></tr><tr><td>250mm</td><td>249mm</td><td>5.0µm</td></tr></table> Parallel F.L. Tolerances ±2% to nearest mm. EFL from thin lens formula. BFL is referenced from the lens surface.	Effective F.L.	Back F.L.	Wavelength	231mm	229mm	0.633µm	233mm	231mm	1.064µm	239mm	237mm	3.0µm	250mm	249mm	5.0µm
Effective F.L.	Back F.L.	Wavelength																		
231mm	229mm	0.633µm																		
233mm	231mm	1.064µm																		
239mm	237mm	3.0µm																		
250mm	249mm	5.0µm																		

CaF₂ 负透镜

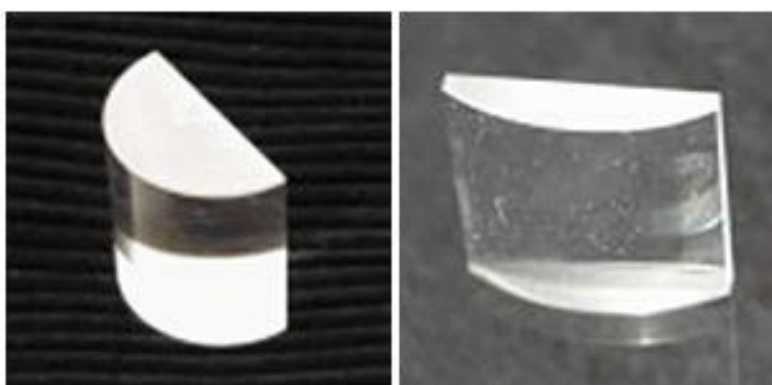


订购信息:

订购型号	规格	曲率	焦距		CaF2 等级	参数
CAF25LE NS-50	25mm Ø	-20.40 (±2%)	-50m m @ 3µm		IR 平凹	CALCIUM FLUORIDE PLANO-CONCAVE LENS 25mm Ø X -50mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:3.0mm (±0.1mm) Radius of Curvature 1:-20.40 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:7.3mm (derived) Effective F.L. Back F.L. Wavelength -47mm -49mm 0.633µm -48mm -50mm 1.064µm -49mm -51mm 3.0µm -51mm -53mm 5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF25LE NS-100	25mm Ø	-40.32 (±2%)	-100 mm @ 3µm	IR 平凹	CALCIUM FLUORIDE PLANO-CONCAVE LENS 25mm Ø X -100mm F.L. @ 3µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:2.0mm (±0.1mm) Radius of Curvature 1:-40.32 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:3.8mm (derived) Effective F.L. Back F.L. Wavelength -93mm-95mm0.633µm -94mm-96mm1.064µm -97mm-98mm3.0µm -101mm-102mm5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.
CAF25LE NS-150	25mm Ø	-59.85 (±2%)	-150 mm @ 5µm	IR 平凹	CALCIUM FLUORIDE PLANO-CONCAVE LENS 25mm Ø X -150mm F.L. @ 5µm MATERIAL: IR Grade CaF₂ Diameter:25.0mm (±0.1mm) Centre Thickness:2.1mm (±0.1mm) Radius of Curvature 1:-59.85 (±2%) Radius of Curvature 2:Plano S/D:60/40 Edge thickness:3.3mm (derived) Effective F.L. Back F.L. Wavelength -138mm-141mm0.633µm -139mm-142mm1.064µm -143mm-146mm3.0µm -150mm-152mm5.0µm Paraxial F.L. Tolerances ±2% to nearest mm EFL from this lens formula. BFL is referenced from the lens surface.

CaF₂ 柱面透镜:





订购信息:

订购型号	规格	曲率	焦距	CaF ₂ 等级
CAF25-25LENS25C	25mm x 25mm 平凸半圆柱	12.5 (±2%)	25mm @ 3μm	IR 平凸
CAF25-25LENS350C	25mm x 25mm	150 (±2%)	350mm @ 3μm	IR 平凸

