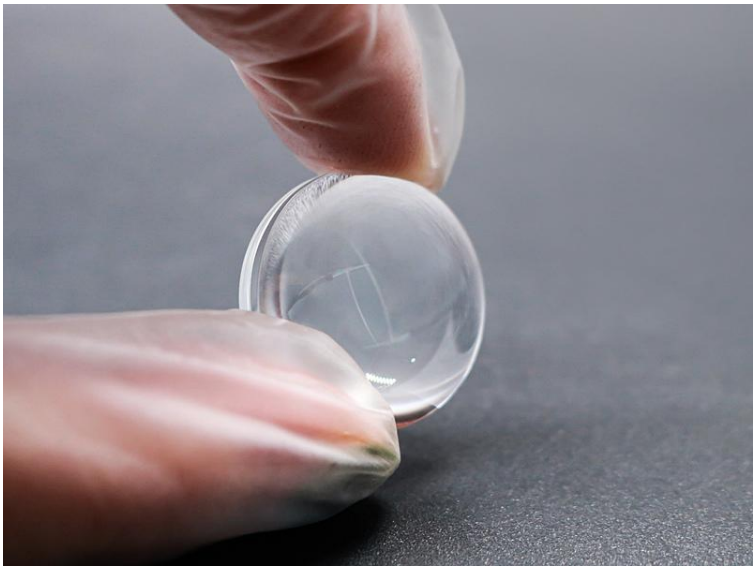
IR/UV 抛光氟化钙 CaF2 正/负透镜 0.13-10um (平凸/双凸/平凹/柱面平凸)



总览

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

产品应用

- 中红外 QCL 激光器
- 中红外激光光路搭建

通用参数

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	7.8×10-4cm-1@2.7um
吸收峰	35um
dn/dT	-10.6×10-6/℃
dn/du=0	dn/du=0
密度	3.18g/cc
熔点	1360℃
导热率	9.71Wm-1K-1
热膨胀	18.85×10-6/℃
硬度	Knoop 158.3
比热容	854J Kg-1K-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	C11=164 ,C12=53 ,C44=33.7

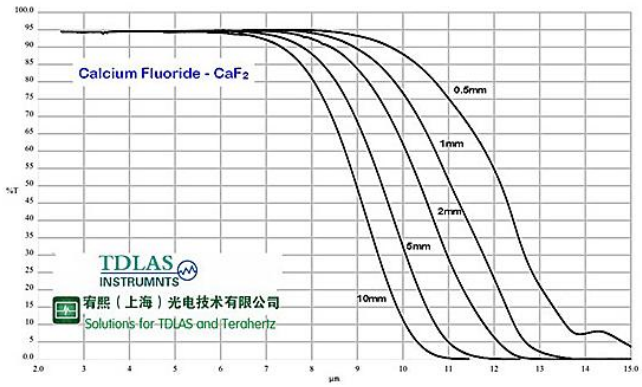
表现弹性极限	36.54MPa
泊松比	0.26
溶解度	0.0017g/100g with，20℃
分子量	78.08
类型/结构	立方裂解
反射损耗	5.4% at 5um

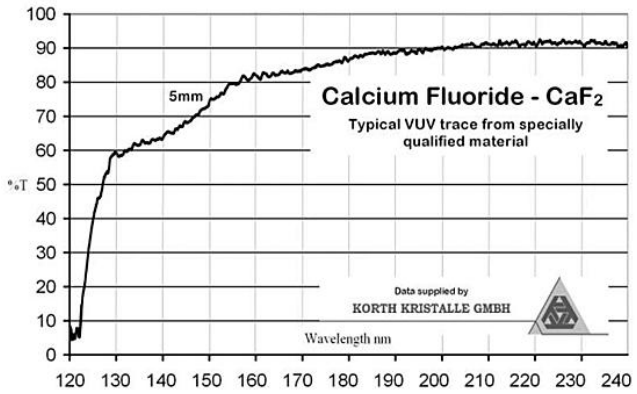
折射率:(No=Ordinary Ray 普通射线)

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		

光谱透射图





订购型号	规格	曲率	焦距	CaF2 等级	参数
CAF12.7LENS10U	12.7mm Ø	10.16（±2%）	10mm @ 300nm	UV 双凸	**CALCIUM FLUORIDE BI-CONVEX LENS** 12.7mm Ø X 10mm F.L. @ 300nm MATERIAL: UV Grade CaF_2 Diameter: 12.7mm (+0.0/-0.127mm) Centre Thickness: 6.0mm (±0.127mm) Radius of Curvature 1: 10.16 (±2%) Radius of Curvature 2: 10.16 (±2%) S/D: 60/40 Edge thickness: 1.5mm (derived) Effective F.L. / Back F.L. / Wavelength 12.3mm / 10.0mm / 0.3μm 12.9mm / 10.6mm / 0.633μm 13.9mm / 11.6mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF12.7LENS12	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 CaF_2 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. / Back F.L. / Wavelength 15.0mm / 12.7mm / 0.633μm 15.5mm / 13.2mm / 3.0μm 16.2mm / 13.9mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF12.7LENS12U	12.7mm Ø	12.0（±2%）	12mm @ 300nm	UV 双凸	
CAF12.7LENS100	12.7mm Ø	40.32（±2%）	100mm @ 5μm	IR 平凸	

CAF16LENS 90	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 CaF_2 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 89mm / 88mm / 3.0μm 93mm / 92mm / 5.0μm Paraxial FL Tolerances ±5% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF18.5LENS26	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF20LENS 50	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 CaF_2 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 FL Tolerances ±5% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.

CAF25LENS 25U	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 CaF_2 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%) S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. / Pr.Plane F.L. / Back F.L. / Wavelength 26.0mm / 25.0mm / 22.2mm / 0.35μm 26.8mm / / 23.0mm / 0.633μm Paraxial FL Tolerances ±5% EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 25	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 CaF_2 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%) S/D: 60/40 Edge thickness: 1.6mm (derived) Effective F.L. / Pr.Plane F.L. / Back F.L. / Wavelength 25.9mm / / 22.2mm / 0.633μm 26.2mm / / 22.4mm / 1.064μm 26.8mm / 25.4mm / 23.0mm / 3.0μm 28.0mm / / 24.1mm / 5.0μm Paraxial FL Tolerances ±5% EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 50B	25mm Ø	39.1（± 2%）	50mm @ 5μm	IR 双凸	
CAF25LENS 50	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 CaF_2 Diameter: 25.0mm (±0.1mm) Centre Thickness: 6.1mm (±0.1mm) Radius of Curvature 1: 20.9 (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. / Back F.L. / Wavelength 48mm / 44mm / 0.633μm 49mm / 45mm / 1.064μm 50mm / 45mm / 3.0μm 52mm / 48mm / 5.0μm Paraxial FL Tolerances ±5% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.

CAF25LENS 50U	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 CaF_2 Diameter: 25.0mm (±0.1mm) Centre Thickness: 5.7mm (±0.1mm) Radius of Curvature 1: 22.96mm (±2%) Radius of Curvature 2: Plano S/D: 60/40 Edge thickness: 2.0mm (derived) Effective F.L. / Back F.L. / Wavelength 51mm / 47mm / 0.35 μm 53mm / 49mm / 0.633μm 54mm / 49mm / 1.064μm 55mm / 51mm / 3.0μm 57mm / 53mm / 5.0μm Paraxial FL Tolerances ±5% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.
CAF25LENS 75	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 CaF_2 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. / Back F.L. / Wavelength 72mm / 69mm / 0.633μm 73mm / 70mm / 1.064μm 75mm / 72mm / 3.0μm 78mm / 75mm / 5.0μm Paraxial FL Tolerances ±5% to nearest mm EFL from thin lens formula. BFL is referenced from the back lens surface.
CAF25LENS 100B	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 100	25mm Ø	43.73（± 2%）	100mm @ 3μm	IR 平凸	**CALCIUM FLUORIDE PLANO-CONCAVE LENS** 25mm Ø X -100mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 Diameter: 25.0mm (±0.1mm) Centre Thickness: 2.0mm (±0.1mm) Radius of Curvature 1: -40.32 (±2%) Radius of Curvature 2: Plano
CAF25LENS 100U	25mm Ø	43.73（± 2%）	100mm @ 350nm	UV 平凸	

CAF25LENS 130	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 CaF_2 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. / Back F.L. / Wavelength 128mm / 126mm / 0.633μm 129mm / 126mm / 1.064μm 133mm / 130mm / 3.0μm 139mm / 136mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 150	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 150U	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF25LENS 200U	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 300	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 CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS 500	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 CaF_2 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. / Back F.L. / Wavelength 467mm / 465mm / 0.633μm 471mm / 469mm / 1.064μm 483mm / 482mm / 3.0μm 506mm / 504mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF25.4LENS200	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 CaF_2 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. / Back F.L. / Wavelength 187mm / 185mm / 0.633μm 188mm / 186mm / 1.064μm 193mm / 191mm / 3.0μm 202mm / 200mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF27LENS50	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 CaF_2 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. / Back F.L. / Wavelength 51mm / 48.7mm / 0.633μm 51mm / 49.2mm / 1.064μm 53mm / 50.5mm / 3.0μm 55mm / 52.8mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF30LENS70	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 CaF_2 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. / Back F.L. / Wavelength 67mm / 65mm / 0.633μm 67mm / 65mm / 1.064μm 69mm / 67mm / 3.0μm 72mm / 70mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF31.5LENS60	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 CaF_2 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. / Back F.L. / Wavelength 64mm / 59mm / 0.633μm 64mm / 59mm / 1.064μm 65mm / 61mm / 3.0μm 69mm / 64mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF38.1LENS75	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 CaF_2 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. / Back F.L. / Wavelength 78mm / 72mm / 0.633μm 79mm / 73mm / 1.064μm 81mm / 75mm / 3.0μm 85mm / 78mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF38.1LENS75U	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 CaF_2 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. / Back F.L. / Wavelength 72mm / 66mm / 0.248μm 78mm / 72mm / 0.633μm 79mm / 73mm / 1.064μm 81mm / 75mm / 3.0μm 85mm / 78mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF38.1LE NS160	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 CaF_2 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. / Back F.L. / Wavelength 157mm / 154mm / 0.633μm 159mm / 156mm / 1.064μm 163mm / 160mm / 3.0μm 171mm / 167mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF38.1LE NS250U	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 CaF_2 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. / Back F.L. / Wavelength 213mm / 211mm / 0.248μm 231mm / 229mm / 0.633μm 233mm / 231mm / 1.064μm 240mm / 237mm / 3.0μm 250mm / 247mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF38.1LE NS475	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 CaF_2 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. / Back F.L. / Wavelength 440mm / 437mm / 0.633μm 444mm / 442mm / 1.064μm 456mm / 453mm / 3.0μm 477mm / 474mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF40LENS 120	40mm Ø	50.25（±2%）	120mm @ 3μm	UV 平凸	

CAF40LENS 150	40mm Ø	64（± 2%）	150mm @ 3μm	IR 平凸	**CALCIUM FLUORIDE PLANO-CONVEX LENS** 40mm Ø X 150mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 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. / Back F.L. / Wavelength 148mm / 145mm / 0.633μm 149mm / 146mm / 1.064μm 153mm / 150mm / 3.0μm 160mm / 157mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF40LENS 200	40mm Ø	85（± 2%）	200mm @ 3μm	IR 平凸	**CALCIUM FLUORIDE PLANO-CONVEX LENS** 40mm Ø X 200mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 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. / Back F.L. / Wavelength 196mm / 194mm / 0.633μm 198mm / 196mm / 1.064μm 203mm / 201mm / 3.0μm 212mm / 210mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF40LENS 330	40mm Ø	138（± 2%）	330mm @ 3μm	IR 平凸	
CAF40LENS 440	40mm Ø	187（± 2%）	440mm @ 3μm	IR 平凸	**CALCIUM FLUORIDE PLANO-CONVEX LENS** 40mm Ø X 440mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 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. / Back F.L. / Wavelength 432mm / 431mm / 0.633μm 436mm / 435mm / 1.064μm 448mm / 446mm / 3.0μm 468mm / 467mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF50LENS 80	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 CaF_2 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. / Back F.L. / Wavelength 79mm / 72mm / 0.633μm 80mm / 73mm / 1.064μm 82mm / 75mm / 3.0μm 86mm / 78mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF50LENS 100	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 CaF_2 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. / Back F.L. / Wavelength 99mm / 92mm / 0.633μm 100mm / 93mm / 1.064μm 103mm / 96mm / 3.0μm 108mm / 101mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF50LENS 135	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 CaF_2 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. / Back F.L. / Wavelength 132mm / 126mm / 0.633μm 133mm / 128mm / 1.064μm 136mm / 131mm / 3.0μm 143mm / 137mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF50LENS 250	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 CaF_2 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) Effective F.L. / Back F.L. / Wavelength 231mm / 229mm / 0.633μm 233mm / 231mm / 1.064μm 239mm / 237mm / 3.0μm 250mm / 248mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

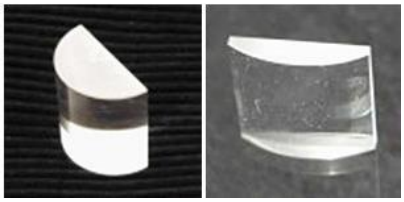
CaF2 负透镜

订购信息:

订购型号	规格	曲率	焦距	CaF2 等级	参数
CAF25LENS-50	25mm Ø	-20.40（± 2%）	-50mm @ 3μm	IR 平凹	**CALCIUM FLUORIDE PLANO-CONCAVE LENS** 25mm Ø X -50mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 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 FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.

CAF25LENS-100	25mm Ø	-40.32 (±2%)	-100mm @ 3μm	IR 平凹	**CALCIUM FLUORIDE PLANO-CONCAVE LENS** 25mm Ø X -100mm F.L. @ 3μm MATERIAL: IR Grade CaF_2 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 / -95mm / 0.633μm -94mm / -96mm / 1.064μm -97mm / -98mm / 3.0μm -101mm / -102mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin lens formula. BFL is referenced from the lens surface.
CAF25LENS-150	25mm Ø	-59.85 (±2%)	-150mm @ 5μm	IR 平凹	**CALCIUM FLUORIDE PLANO-CONCAVE LENS** 25mm Ø X -150mm F.L. @ 5μm MATERIAL: IR Grade CaF_2 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 / -141mm / 0.633μm -139mm / -142mm / 1.064μm -143mm / -146mm / 3.0μm -150mm / -152mm / 5.0μm Paraxial FL Tolerances ±2% to nearest mm EFL from thin 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	CaF2 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