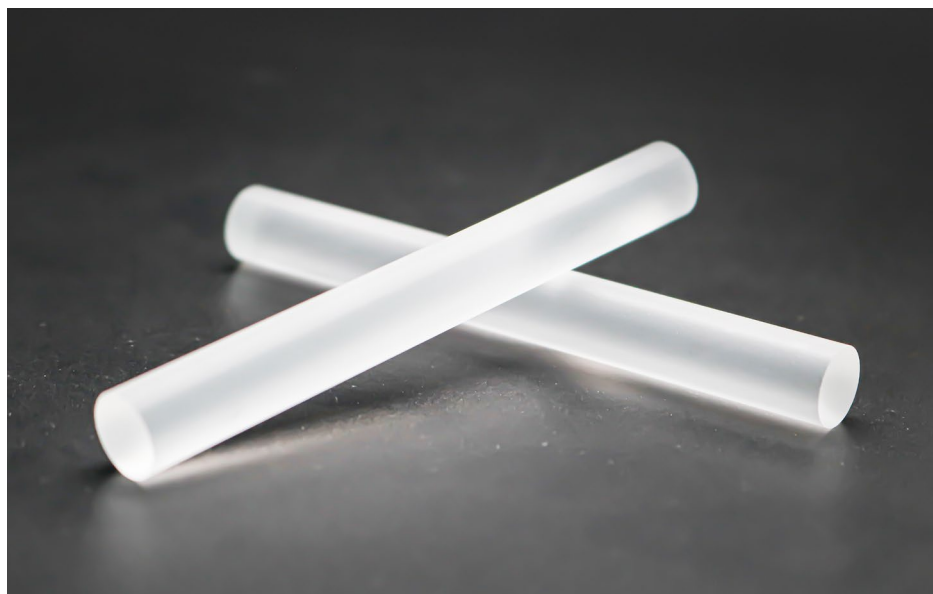




中红外CaF₂圆柱Rod



产品描述:

氟化钙 (CaF₂) 是近红外分束器的优选材料选择。我们的CaF₂具有最高的纯度，质量和稠度，并且在所有SiO₂材料中发现零O-H吸收。羟基带分束器衬底吸收常常限制在近红外测量中的测量精度。我们用于CaF₂分束器的Photon Pro涂层的带宽被优化以覆盖所有近红外和大多数拉曼区域，包括斯托克斯和反斯托克斯。

产品特点:

- ✧ 高数值孔径，最佳收集效率
- ✧ 紧凑的单透镜设计
- ✧ 衍射限制设计
- ✧ RoHS 认证

产品应用:

- ✧ 深红外光谱分析
- ✧ 紫外激光传输
- ✧ X射线检测
- ✧ 红外光学
- ✧ 外延基片



产品参数:

透射波长范围:	0.13 to 10 μ m (Note: IR grade will have restricted performance outside IR range)	0.12 to 7 μ m (1)	0.6 to 21.0 μ m	0.85 to > 20 micron (1)(3)
折射率:	1.39908 at 5 μ m (1) (2)	No 1.413 at 0.22 μ m (4)	2.4028 at 10.6 μ m	2.653 @ 10 microns (1)
反射损耗:	5.4% at 5 μ m	5.7% at 0.22 μ m (2 surfaces)	29.1% at 10.6 μ m (2 surfaces)	32% @ 10 microns
吸收系数:	7.8×10^{-4} cm ⁻¹ @ 2.7 μ m	40×10^{-3} cm ⁻¹ at 2.7 μ m	0.0005 cm ⁻¹ at 10.6 μ m	n/a
Reststrahlen Peak:	35 μ m	20 μ m (1)	45.7 μ m	n/a
dn/dT:	-10.6 x 10 ⁻⁶ / ° C (3)	2.3 (para) 1.7 (perp) at 0.4 μ m (1)	+61 x 10 ⁻⁶ / ° C at 10.6 μ m at 298K	5.0 x 10 ⁻⁵ K ⁻¹
dn/d μ = 0:	1.7 μ m	1.4 μ m	5.5 μ m	n/a
密度:	3.18 g/cc	3.18g/cc	5.27 g/cc	6.2 g cm ⁻³ (2)
熔点:	1360 ° C	1255 ° C	1525 ° C (see notes below)	1092 ° C
热导率:	9.71 W m ⁻¹ K ⁻¹ (4)	21 (para) 33.6 (perp) Wm ⁻¹ K ⁻¹ at 300K (3)	18 W m ⁻¹ K ⁻¹ at 298K	6.2 W.m ⁻¹ .K ⁻¹ at 293 K
热膨胀:	18.85 x 10 ⁻⁶ / ° C (5)(6)	13.7 (para) 8.9 (perp) x 10 ⁻⁶ /K (1)	7.1 x 10 ⁻⁶ / ° C at 273K	5.9x10 ⁻⁶ K ⁻¹ at 293 K
硬度:	Knoop 158.3 (100) with 500g indenter	Knoop 415	Knoop 120 with 50g indenter	Knoop 45 (3)
比热容:	854 J Kg ⁻¹ K ⁻¹	1003 J Kg m ⁻¹ K ⁻¹	339 J Kg ⁻¹ K ⁻¹	210 J.kg ⁻¹ .K ⁻¹ at 293 K
介电常数:	6.76 at 1MHz (7)	4.87 (para) 5.45 (perp) at 1MHz (1)	n/a	11 @ 1MHz
Youngs Modulus (E):	75.8 GPa (7)	138 GPa (2)	67.2 GPa	36.52 GPa
剪切模量 (G):	33.77 GPa (7)	54.66GPa (2)	n/a	n/a
体积弹性模量 (K):	82.71 GPa (7)	101.32 GPa (2)	40 GPa	25 GPa
弹性系数:	C11 = 164; C12 = 53 C44 = 33.7 (7)	C11=140; C12=89; C44=57 C13=63 C66=96 (2)	Not Available	C11=53.51; C12=36.81; C44=19.94
表观弹性极限:	36.54 MPa	49.6 MPa (7200 psi)	55.1 MPa (8000 psi)	5.9 MPa (3)
泊松比:	0.26	0.276 (2)	0.28	0.41
溶解度:	0.0017g/100g water at 20 ° C	0.0002g/100g water	0.001g/100g water	Insoluble in water
分子量:	78.08	62.32	144.33	240.02
类别/结构:	Cubic Fm3m (#225) Fluorite Structure. Cleaves on (111)	Tetragonal P42/mnm (#136) Rutile Structure. Can cleave on c-axis but not easily.	FCC Cubic, F43m (#216), Zinc Blende structure. (Polycrystalline)	Cubic ZnS (110) cleavage

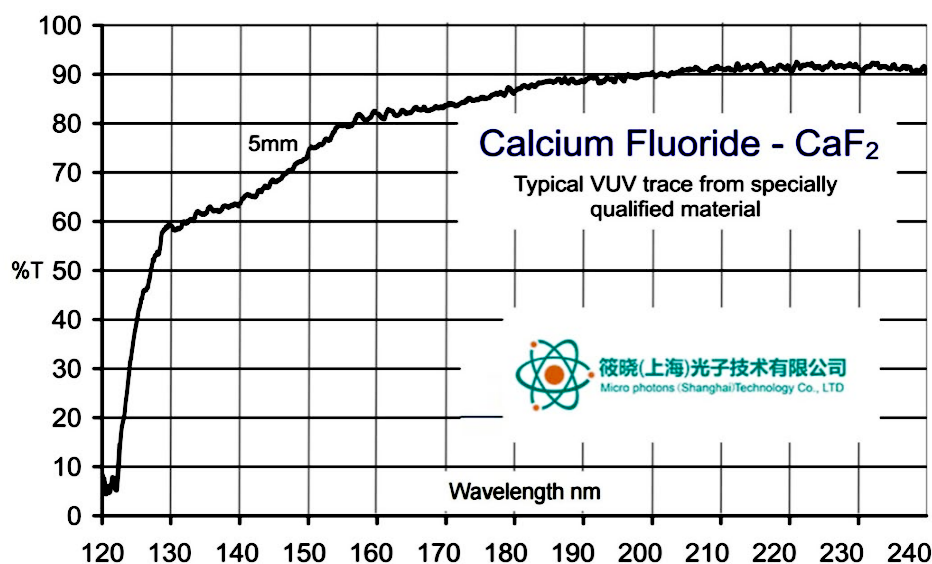
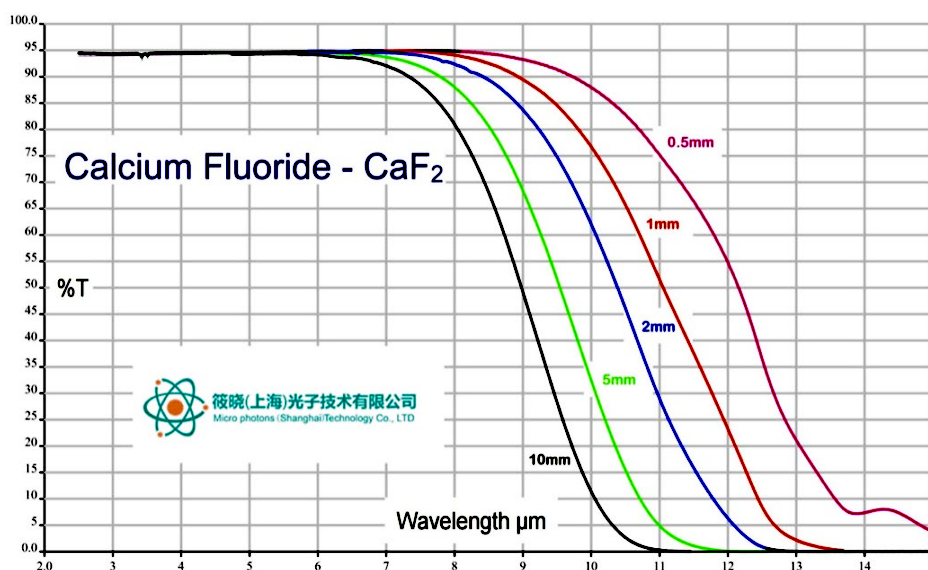
注1: 警告: 镉盐是应该考虑毒性的, 所以操作时候务必小心。

No = Ordinary Ray:

μ m	No	μ m	No	μ m	No
0.149	1.5800	0.161	1.5490	0.195	1.5000
0.200	1.4950	0.222	1.4800	0.248	1.4680
0.266	1.4621	0.280	1.4584	0.300	1.454
0.337	1.4481	0.400	1.4419	0.486	1.4370
0.588	1.4339	0.656	1.4325	0.687	1.4320
0.728	1.4314	0.884	1.4298	1.014	1.4288
1.100	1.4283	1.250	1.4275	1.650	1.4256
1.900	1.4244	2.058	1.4236	2.450	1.4214
2.700	1.4199	2.800	1.4192	3.050	1.4175
3.400	1.4149	4.000	1.4096	4.400	1.4057
4.800	1.4014	5.000	1.3991	5.304	1.3952
5.893	1.3871	6.483	1.3782	7.072	1.3681
7.661	1.357	8.251	1.3444	8.840	1.3308
9.429	1.3161				



透射曲线图:



订购信息:

订购型号 (需要提供加工直径以及圆柱长度最大90mm)

型号: MP-CAF2-D10-L80- 中红外抛光氟化钙 圆柱

单价: 2800元/片 库存数量: 0片

描述:

中红外抛光氟化钙 (CaF_2) 圆柱

尺寸: 直径10mm dia x 80mm (长度)



订购信息:

MIR-QCL- W□□□□ -☆-△-XX

W□□□□: Wavelength

5260: 5260nm

7400: 7400nm

☆: 准直输出

1: 带

0: 不带

△: 激光器类型

FP: QCL-FP

DFB: QCL-DFB

XX: 输出功率

010=10mw

100=100mw