

带通滤光片和激光线滤光片，近红外，中心波长 700 - 1650 nm

带通滤光片特性

- 中心波长：700 nm 至 1650 nm
- 带通范围：3, 10, 12, 25, 30 或 40 nm
- Ø1/2 英寸或Ø1 英寸已安装的滤光片
- 边缘刻线有助于长期稳定性
- 每个滤光片都提供典型的透射率曲线
- 激光线滤光片用于常见二极管和 Nd:YAG 激光器

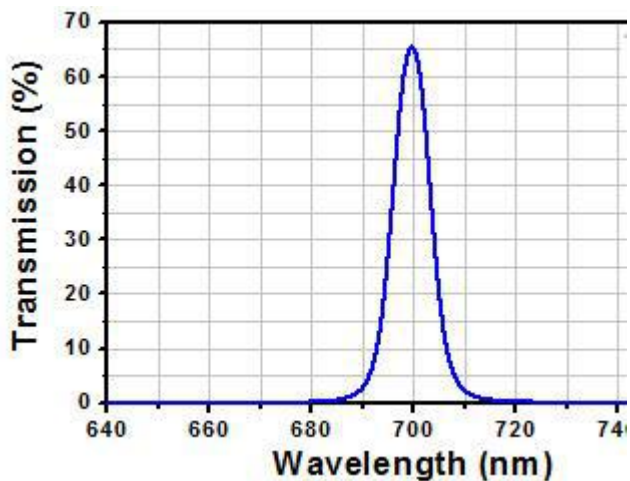
本页介绍的**带通滤光片**和激光线滤光片的中心波长从 700 nm 到 1650 nm。每个滤光片都安装在一个阳极氧化发黑的无螺纹铝环中，环外径为Ø1/2 英寸或Ø1 英寸，边缘最大厚度为 6.3 mm。请注意Ø1/2 英寸的滤光片在表格中以绿色背景显示。

QXKJ 的带通滤光片使用最简单的方法来透过特定波长范围的光，但是阻挡其它不需要的的光。滤光片的设计本质上是通过真空沉积技术形成的薄膜法布里-珀罗干涉仪，它由均匀间隔层分隔的两个反射介质层堆叠组成。这些反射介质膜堆叠由反射率可超过 99.99% 的高、低折射率交替的材料组成。通过改变间隔层的厚度和/或反射层的数量，就可以改变滤光片的中心波长和带宽。由于使用法布里-珀罗设计，这些滤波片的设计入射角(AOI)为 0 度。使用其它 AOI 时，透射波长范围将产生偏移而且可能减小透射波段。关于带通滤光片性质和结构的详细信息，请参阅教程标签。

这种滤光片在通带区域内具有非常高的透过率，但是在通带区域两边被阻挡的光谱范围较窄。可以增加另外一个挡光元件来弥补这个缺点，根据对滤光片的要求，该元件可以是全介质型或金属介质型。虽然这个额外的挡光元件会滤除通带外的所有不需要的的光，但它也会减少滤光片的整体透过率。对波前有严格要求的成像等应用，请考虑使用优质带通滤光片。

每个滤光片都安装在经过氧化发黑处理的铝环中，用箭头标出了光透射方向。这个环使得拿取更容易，且通过限制散射增强了阻挡的光密度。这些滤光片可安装在我们多种滤光片安装座和转轮中。因为这些安装座没有螺纹，安装时需用卡环将滤光片安装在我们的内螺纹透镜套管中。我们建议不要将滤光片从安装座上取下，因为滤光片是由环氧树脂及安装环固定的多层玻璃组成的。这些玻璃层用于防止介质膜受空气影响；暴露在空气中会显著减小滤光片的透过率。

请注意，由于介质膜逐渐变质(主要是水蒸气影响)，我们的带通滤光片一般使用寿命是两年。老化的滤波片的整体带通过透率将降低。



带通滤光片，700 - 790 nm

Item #	CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
QXB700-10	700 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB700-40	700 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB710-10	710 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB720-10	720 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB730-10	730 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXL730-10	730 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Diode	Ø1"
QXB740-10	740 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB750-10	750 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB750-40	750 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB760-10	760 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB770-10	770 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB780-10	780 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXL05780-10	780 ± 2 nm	10 ± 2 nm	70%	200 - 1100 nm	Diode	Ø1/2"
QXL780-10	780 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Diode	Ø1"
QXB790-10	790 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"

- 中心波长

- 半高宽
- 峰值透过率
- < 0.01% (< -40 dB)

带通滤光片, 800 - 890 nm

Item #	CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
QXB800-10	800 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB800-40	800 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB810-10	810 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB820-10	820 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB830-10	830 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXL830-10	830 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Diode	Ø1"
QXB840-10	840 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB850-10	850 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXL05850-10	850 ± 2 nm	10 ± 2 nm	70%	200 - 1100 nm	Diode	Ø1/2"
QXL850-10	850 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Diode	Ø1"
QXB850-40	850 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB860-10	860 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB870-10	870 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXB880-10	880 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
QXL880-10	880 ± 2 nm	10 ± 2 nm	50%	200 - 1150 nm	Diode	Ø1"
QXB880-40	880 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB880-70	880 ± 8 nm	70 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
QXB890-10	890 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"

带通滤光片, 900 - 990 nm

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
900 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
900 ± 8 nm	40 ± 8 nm	70%	200 - 1150 nm	N/A	Ø1"
905 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Diode	Ø1"
905 ± 5 nm	25 ± 5 nm	70%	200 - 1150 nm	Diode	Ø1"

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
910 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
920 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
930 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
940 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
950 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
960 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
970 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
980 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"
990 ± 2 nm	10 ± 2 nm	50%	200 - 1200 nm	N/A	Ø1"

带通滤光片, 1000 - 1250 nm

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1000 ± 2 nm	10 ± 2 nm	45%	200 - 3000 nm	N/A	Ø1"
1050 ± 2 nm	10 ± 2 nm	45%	200 - 3000 nm	N/A	Ø1"
1064 ± 0.6 nm	3 ± 0.6 nm	55%	200 - 1100 nm	Nd:YAG	Ø1/2"
1064 ± 0.6 nm	3 ± 0.6 nm	45%	200 - 1150 nm	Nd:YAG	Ø1"
1064 ± 2 nm	10 ± 2 nm	70%	200 - 1100 nm	Nd:YAG	Ø1/2"
1064 ± 2 nm	10 ± 2 nm	70%	200 - 1150 nm	Nd:YAG	Ø1"
1070 ± 2 nm	10 ± 2 nm	70%	200 - 1200 nm	N/A	Ø1"
1100 ± 2 nm	10 ± 2 nm	40%	200 - 3000 nm	N/A	Ø1"
1150 ± 2 nm	10 ± 2 nm	40%	200 - 3000 nm	N/A	Ø1"
1152 ± 2 nm	10 ± 2 nm	45%	200 - 3000 nm	HeNe	Ø1"
1200 ± 2 nm	10 ± 2 nm	40%	200 - 3000 nm	N/A	Ø1"
1250 ± 2 nm	10 ± 2 nm	40%	200 - 3000 nm	N/A	Ø1"

带通滤波片, 1300 - 1490 nm

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1300 ± 2.4 nm	12 ± 2.4 nm	40%	200 - 3000 nm	N/A	Ø1"
1300 ± 6 nm	30 ± 6 nm	40%	200 - 1850 nm	N/A	Ø1"

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1310 ± 2 nm	12 ± 2.4 nm	40%	200 - 3000 nm	N/A	Ø1"
1320 ± 2 nm	12 ± 2.4 nm	40%	200 - 3000 nm	N/A	Ø1"
1330 ± 2 nm	12 ± 2.4 nm	40%	200 - 3000 nm	N/A	Ø1"
1340 ± 2 nm	12 ± 2.4 nm	40%	200 - 3000 nm	N/A	Ø1"
1350 ± 2.4 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1400 ± 2.4 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1450 ± 2.4 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1480 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1490 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"

带通滤光片, 1500 - 1550 nm

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1500 ± 2.4 nm	12 ± 2.4 nm	35%	200 - 1850 nm	N/A	Ø1"
1510 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1520 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1530 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1540 ± 2 nm	12 ± 2.4 nm	35%	200 - 3000 nm	N/A	Ø1"
1550 ± 2.4 nm	12 ± 2.4 nm	50%	200 - 1850 nm	Diode	Ø1"
1550 ± 6 nm	30 ± 6 nm	50%	200 - 1850 nm	Diode	Ø1"
1550 ± 8 nm	40 ± 8 nm	45%	200 - 1850 nm	Diode	Ø1/2"
1550 ± 8 nm	40 ± 8 nm	45%	200 - 1850 nm	Diode	Ø1"

带通滤光片, 1560 - 1650 nm

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1560 ± 2 nm	12 ± 2.4 nm	50%	200 - 1850 nm	N/A	Ø1"
1570 ± 2 nm	12 ± 2.4 nm	50%	200 - 1850 nm	N/A	Ø1"
1580 ± 2 nm	12 ± 2.4 nm	50%	200 - 1850 nm	N/A	Ø1"
1590 ± 2 nm	12 ± 2.4 nm	50%	200 - 1850 nm	N/A	Ø1"
1600 ± 2.4 nm	12 ± 2.4 nm	50%	200 - 1850 nm	N/A	Ø1"

CWL _a	FWHM _b	T (Min) _c	Blocking _d	Laser Line	Size
1610 ± 2 nm	12 ± 2.4 nm	50%	200 – 1850 nm	N/A	Ø1"
1620 ± 2 nm	12 ± 2.4 nm	50%	200 – 1850 nm	N/A	Ø1"
1650 ± 2.4 nm	12 ± 2.4 nm	50%	200 – 1850 nm	N/A	Ø1"