

## Cold Mirror/IR Pass Filters

### Overview

<p>IR Pass Filters</p> <p>Cold Mirror</p> <p>IR Transmission Filters</p> <p><b>Key Features</b></p> <p>Infrared transmission.</p> <p>Visible light reflection or block.</p> <p><b>Applications</b></p> <p>Night vision monitor.</p> <p>PC / Web camera filters.</p> <p>Infrared sensor.</p> <p>CCTV lens filters.</p> <p>Automatic Optical Inspection Equipment(AOI)</p> <p>IR Camera.</p>	<p><b>Cold Mirror/Infrared Pass</b> ROCOES Electro-Optics co., ltd.</p>
	<p><b>Glass Filters</b></p>

### Specifications

**ITEM NO: YL-IRPASS-700nm (Reflect visible light)**

<p><b>Spectral Characteristics</b></p> <p>T50%=700 +/- 15nm</p> <p>Tave&gt;80% @ 750-1000nm</p> <p>Tave&lt;3% @ 430-650nm</p>	
<p><b>Physical Characteristics</b></p> <p><b>Thickness</b></p> <p>Glass: 0.7, 1.1, 2.0, 3.0mm</p> <p>Borosilicate: 1.1mm</p> <p><b>Dimension</b></p> <p>Square: 3*3 ~ 160*160mm</p> <p>Round: 3 ~ 150mm</p> <p><b>Resistant Temperature</b></p> <p>Glass: 150 celsius</p> <p>Borosilicate: 450 celsius</p>	

**ITEM NO: YL-IRPASS-900nm**

<p><b>Spectral Characteristics</b></p> <p>T50%=900 +/- 15nm</p> <p>Tave&gt;90% @ 930-1100nm</p> <p>Tave&lt;3% @ 410-830nm</p>	
<p><b>Physical Characteristics</b></p> <p><b>Thickness</b></p> <p>B270: 1.1, 2.0mm</p> <p>EXG: 0.5, 0.7mm</p> <p>D263t: 0.3mm</p> <p><b>Dimension</b></p> <p>Square: 3*3 ~ 160*160mm</p> <p>Round: 3 ~ 150mm</p> <p><b>Resistant Temperature</b></p> <p>B270: 150 celsius</p> <p>EXG: 450 celsius</p> <p>D263t: 350 celsius</p>	

**ITEM NO: YL-IRPASS-900nm+AR**

**Spectral Characteristics**  
 T50%=900 +/- 15nm  
 Tave>97% @ 930-1100nm  
 Tave<3% @ 410-830nm

**Physical Characteristics**  
**Thickness**  
 B270: 1.1, 2.0mm  
 EXG: 0.5, 0.7mm  
 D263t: 0.3mm  
**Dimension**  
 Square: 3\*3 ~ 160\*160mm  
 Round: 3 ~ 150mm

**Resistant Temperature**  
 B270: 150 celsius  
 EXG: 450 celsius  
 D263t: 350 celsius

**ITEM NO: YL-IRPASS-970nm**

**Spectral Characteristics**  
 Tave>88% @ 1000-1100nm  
 Tave<3% @ 750-930nm

**Physical Characteristics**  
**Thickness**  
 Glass: 0.7, 1.1, 2.0, 3.0mm  
 Borosilicate: 1.1mm  
**Dimension**  
 Square: 3\*3 ~ 160\*160mm  
 Round: 3 ~ 150mm

**Resistant Temperature**  
 Glass: 150 celsius  
 Borosilicate: 450 celsius

**ITEM NO: YL-IRPASS-720nm (Glass Filters, absorb visible light)**

**Spectral Characteristics**  
 T50%=720 +/- 15nm  
 Tave>80% @ 770-1100nm  
 Tave<2% @ 200-670nm

**Physical Characteristics**  
**Thickness**  
 Glass Filters: 1~3.5mm  
**Dimension**  
 Square: 5\*5 ~ 100\*100mm  
 Round: 5 ~ 100mm

**Resistant Temperature**  
 120 celsius

**ITEM NO: YL-IRPASS-760nm (Glass Filters, absorb visible light)**

**Spectral Characteristics**  
 T50%=760 +/- 15nm  
 Tave>80% @ 810-1100nm  
 Tave<2% @ 200-700nm

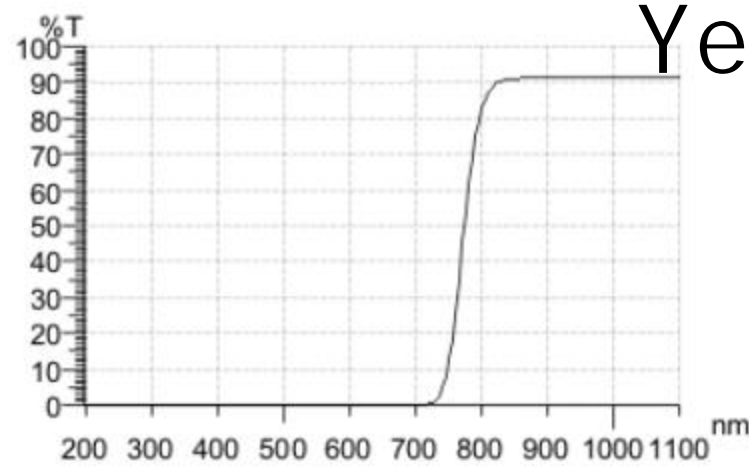
**Physical Characteristics**  
**Thickness**  
 Glass Filters: 1~3.5mm  
**Dimension**  
 Square: 5\*5 ~ 100\*100mm  
 Round: 5 ~ 100mm

**Resistant Temperature**  
 120 celsius

**ITEM NO: YL-IRPASS-780nm (Glass Filters, absorb visible light)**

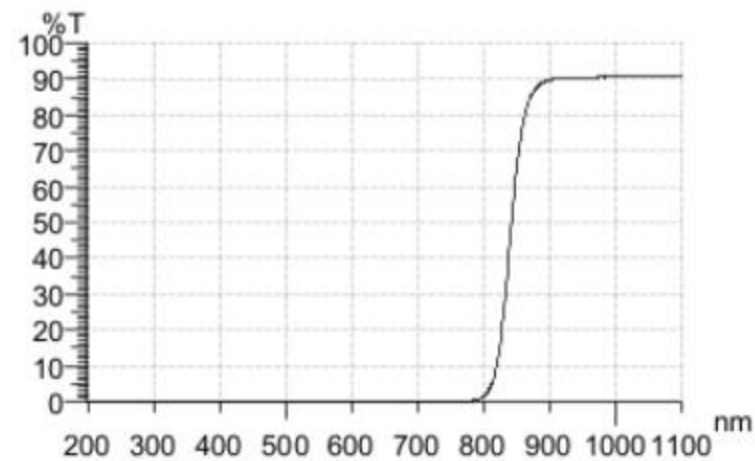
**Spectral Characteristics**  
 T50%=780 +/- 15nm  
 Tave>80% @ 830-1100nm

Tave<2% @ 200-720nm
<b>Physical Characteristics</b>
Thickness
Glass Filters: 1~3.5mm
Dimension
Square: 5*5 ~ 100*100mm
Round: 5 ~ 100mm
<b>Resistant Temperature</b>
120 celsius



**ITEM NO: YL-IRPASS-850nm(Glass Filters, absorb visible)**

<b>Spectral Characteristics</b>
T50%=850 +/- 15nm
Tave>80% @ 900-1100nm
Tave<2% @ 200-790nm
<b>Physical Characteristics</b>
Thickness
Glass Filters: 1~3.5mm
Dimension
Square: 5*5 ~ 100*100mm
Round: 5 ~ 100mm
<b>Resistant Temperature</b>
120 celsius



**Information and Notes**

- 1. 700nm, 900nm, 970nm(Cold Mirror) with 40~52 thin film layers which vacuum-deposited on substrate.
- 2. Option: Side2 with multi-layer Anti-reflection coating to reduce reflection from 4% to 0.5% for less reflect of image or light.
- 3. Coating by PVD-EBGE (Physical Vapor Deposition-Electron Beam Gun Evaporation) .
- 4. The transmittance curves are measurements at 45° of incidence angle.
- 5. The transmittance curves are based on actual measurements and may be different with manufacturing lots.
- 6 720nm,760nm,780nm,850nm(Glass Filters) absorbing the light in orange and red wavelength range and transmittance light in the blue wavelength region.
- 7. The transmittance curves are based on actual measurements and may be different with manufacturing lots.
- 8. Glass Filters are also called "colored glass filters" or "color filters" generically.