



# Hot and Cold Mirrors

## Product Description

Hot Mirrors are used in applications when there is the requirement to separate visible light from heat. The hot mirror accomplishes this by reflecting the heat. The use of Borosilicate type glass allows operation in high temperatures. Operation at an AOI of 0° is preferred. The most common wavelength range for an average transmission of 85% through the hot mirror is 420 – 700nm. The reflective range for the hot mirror for R>95% is 800–1000nm. Additionally, R>50% from 735 – 1080nm.

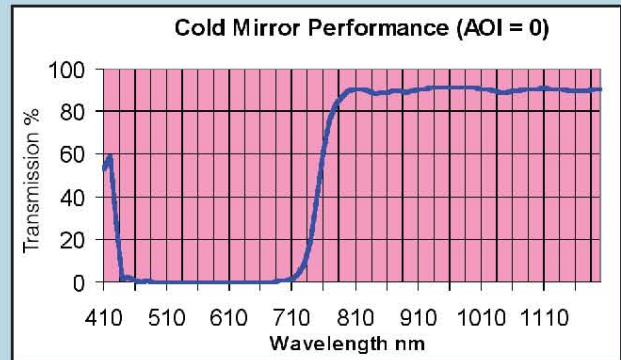
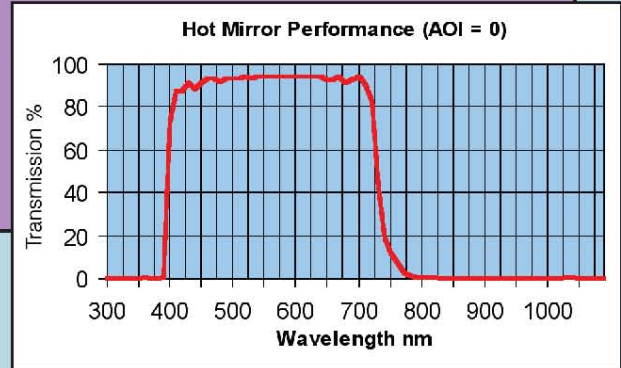
Cold Mirrors are used where the requirements are to reflect visible light and remove the heat by transmission. Operation at an AOI of 45° is preferred. The most common wavelength range for transmission through the cold mirror is 800–1200nm. The average transmission range is T>85%. Additionally, R>95% for 400 - 700nm.

### Features of Hot Mirrors

- High transmission for the visible range
- High reflection for infrared
- Removes heat
- Uses Borofloat® type glass
- Dielectric Coating
- AOI's of 0° or 45°
- Custom mirrors to your configuration

### Features of Cold Mirrors

- High reflection for the visible range
- High transmission for infrared



## Typical Specifications

Hot Mirrors	Cold Mirrors
<b>Material:</b> Borosilicate type Glass	<b>Material:</b> Borosilicate type Glass
<b>Size:</b> 15mm to 300mm	<b>Size:</b> 15mm to 300mm
<b>Thickness:</b> 3.3mm	<b>Thickness:</b> 3.3mm
<b>Mirror coating:</b> Dielectric multilayer	<b>Mirror coating:</b> Dielectric multilayer
<b>Transmission:</b> Tave>85% for 425–700nm	<b>Transmission:</b> Tave>85% for 750–1000nm
<b>Reflection:</b> Rave>90% for 750–1050nm	<b>Reflection:</b> Rave>90% for 400–700nm
<b>Surface Finish:</b> 80-50	<b>Surface Finish:</b> 80-50
<b>Flatness:</b> λ/2 @633nm per inch	<b>Flatness:</b> λ/2 @633nm per inch
<b>Protective Bevel:</b> 0.3mm x 45°	<b>Protective Bevel:</b> 0.3mm x 45°

## Standard Cold/Hot Mirrors

Type	Model	AOI	Price
Cold	MC0-25.4	0	\$45
	MC0-50.8	0	\$55
	MC45-25.4	45	\$45
	MC45-50.8	45	\$55
Hot	MH0-25.4	0	\$48
	MH0-50.8	0	\$72
	MH45-25.4	45	\$49
	MH45-50.8	45	\$65

Custom Cold/Hot Mirrors available.

®Borofloat Schott Corporation

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