



Optical Filter Data Book



URL : www.isuzuglass.com
E-mail : sales@isuzuglass.com

ISUZU GLASS LTD.

Head Office & Factory

1-53, Rinku Ohrai-kita Izumisano, Osaka, 598-0048, Japan
Phone : +81-72-458-6166
Fax : +81-72-458-6661

Tokyo Office

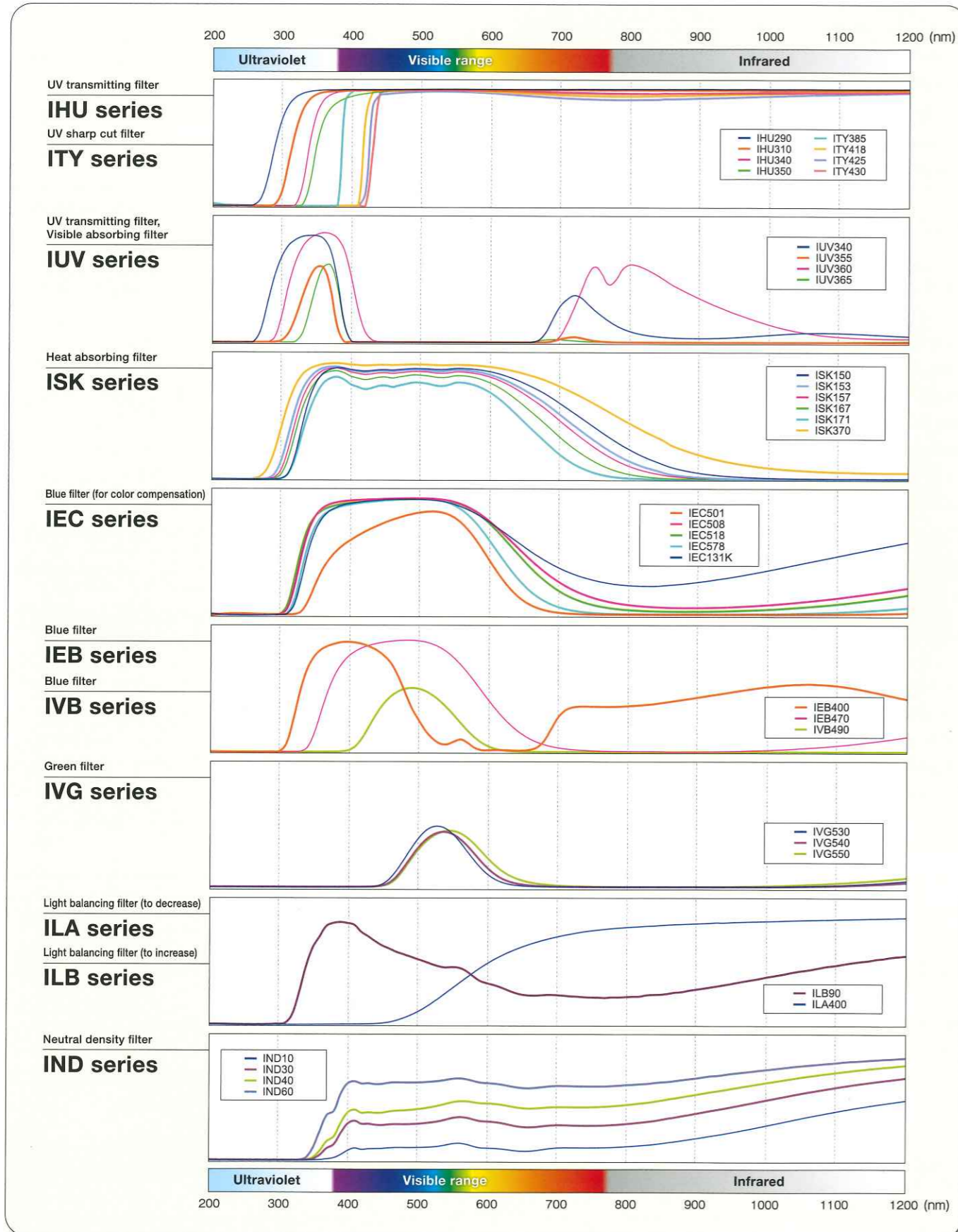
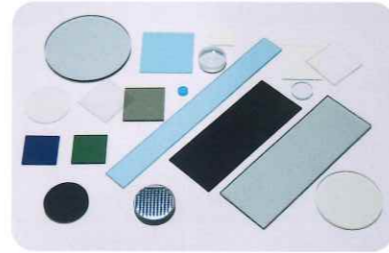
Suzuwa Bldg, 8F-B, 5-2-3 Asakusabashi,
Taito-ku, Tokyo, 111-0053, Japan
Phone : +81-3-5829-6844

ISUZU GLASS, INC.

23505 Crenshaw Blvd., Suite 130 Torrance, California 90505, U.S.A.
Phone : +1-310-517-1866
Fax : +1-310-517-1869

Optical glass filter [Transmission]

ISUZU GLASS offers our own optical glass materials (absorbing filter).
All of our optical filters are eco-friendly glass filters.



Optical glass filter [Optical Properties]

ISUZU	Similar Filter		Thermal Characteristic		Hardness HK (kg/mm ²)	Refractive index n _d	Density d	Water Resistance R _w	Thickness mm	Optical Density OD @1064nm	Transmittance
	SCHOTT	HOYA	α100-300 (X 10 ⁻⁷ /C)	T _g (°C)							
IHU series	IHU290			49	513	571	1.50	2.31	3	2.5±0.5	λT 290±7nm Δλ < 40 TH≥85%
	IHU310			94	533	542	1.52	2.55	3	2.5±0.5	λT 310±7nm Δλ < 40 TH≥85%
	IHU340		(UV34)	58	610	433	1.52	2.57	1	2.5±0.5	λT 340±7nm Δλ < 40 TH≥85%
	IHU350			74	534	610	1.52	2.45	2	2.5±0.5	λT 350±7nm Δλ < 40 TH≥85%
ITY series	ITY385	(GG 385)	L-39	53	498	472	1.49	2.30	6	1.1±0.2	λT50% 385±3nm TH≥85%
	ITY418	GG 420	L-42	68.5	517	491	1.49	2.38	4	1.1±0.2	λT50% 418±3nm TH≥85%
	ITY425			68	529	512	1.50	2.40	4	1.1±0.2	λT50% 425±3nm TH≥85%
	ITY430			68	530	520	1.50	2.39	4	1.1±0.2	λT50% 430±3nm TH≥85%
IUV series	IUV340	UG 11	U-340	59	600	493	1.53	2.64	2	1.0±0.2	λTmax 340±10nm Tmax 83±5%
	IUV355			76	569	416	1.52	2.69	1	3.0±0.5	λTmax 355±5nm Tmax 60±5% 254nm ≤0.1% 405nm ≤0.1%
	IUV360			99	572	561	1.53	2.60	3	2.5±0.5	λTmax 360±5nm Tmax 86±5%
	IUV365			74	536	506	1.53	2.66	3	5.0±0.5	λTmax 365±5nm Tmax 60±5% 254nm ≤0.1% 405nm ≤1.0%
ISK series	ISK150	KG 2	HA-50	66	560	497	1.52	2.60	1	3.0±0.5	λT50% 728±13nm Tave λ400-550nm≥84%
	ISK153			66	566	481	1.52	2.61	1	3.0±0.5	λT50% 703±13nm Tave λ400-550nm≥80%
	ISK157	KG 1	HA-30	66	566	481	1.52	2.61	1	3.0±0.5	λT50% 698±13nm Tave λ400-550nm≥80%
	ISK167	KG 3		65	597	502	1.52	2.64	1	3.0±0.5	λT50% 668±13nm Tave λ400-550nm≥78%
	ISK171	KG 5		64	595	517	1.53	2.63	1	3.0±0.5	λT50% 643±13nm Tave λ400-550nm≥70%
	ISK370	(KG 4)		67	553	482	1.51	2.58	1	3.0±0.5	λT50% 783±13nm Tave λ400-550nm≥87%
IEC series	IEC501	BG 18		66	598	539	1.53	2.63	1	1.0±0.2	λT50% 592±5nm 500nm≥77%
	IEC508	BG 38	(CAW-500) (CS-500)	94	432	489	1.53	2.64	2	1.0±0.2	λT50% 642±5nm 500nm≥89%
	IEC518		C-500	69	565	531	1.53	2.66	1	1.0±0.2	λT50% 615±5nm 500nm≥87%
	IEC578	BG 39	CM-500S	70	513	509	1.54	2.72	1	1.0±0.2	λT50% 604±5nm 500nm≥85%
	IEC131K			135	421	387	1.51	2.59	2	1.0±0.2	400nm≥75% 500nm≥85% 600nm≥45% 700nm≤12%
IEB series	IEB400	BG 25		105	469	559	※2: 1.53	2.57	2	1.0±0.2	334nm≤74% 405nm≥84% 488nm≤38% 725nm≤45%
	IEB470	(BG 23)		148	424	407	※3: 1.53	2.69	3	1.0±0.2	450nm≥84% 633nm≤23% 800nm≤8%
IVB	IVB490			86	520	448	1.53	2.63	3	2.5±0.5	λTmax 490±5nm Tmax 50±5% 390nm≤1% 640nm≤1%
IVG series	IVG530	VG 9	G-533	86	535	492	※3: 1.52	2.57	4	2.5±0.5	λTmax 530±5nm Tmax 50±5% 430nm≤1% 650nm≤5%
	IVG540			86	535	495	※3: 1.52	2.58	3	2.5±0.5	λTmax 540±5nm Tmax 45±5% 430nm≤1% 660nm≤5%
	IVG550		G-550	85	528	482	※3: 1.52	2.58	3	2.5±0.5	λTmax 550±5nm Tmax 43±5% 440nm≤1% 680nm≤5%
ILA	ILA400			83	554	599	1.56	2.72	1	2.0±0.5	Light Balancing Change Ability 400±30 mired
ILB	ILB90			110	502	576	1.51	2.53	2	2.4±0.5	Light Balancing Change Ability -90±5 mired
IND series	IND10	NG 3	ND-13	77	523	569	1.53	2.55	3	2.2±0.2	Tave λ400-700 10±2%
	IND30	NG 4	ND-25	79	532	571	1.52	2.55	2	2.2±0.2	Tave λ400-700 30±2%
	IND40		ND-40	85	536	566	1.52	2.54	3	2.2±0.2	Tave λ400-700 40±2%
	IND60	NG 5	ND-50	80	535	625	1.52	2.55	1	2.2±0.2	Tave λ400-700 60±2%
IIR-SF series	IIR-SF1			※1: 161	236	124	※4: 2.68	4.15	1	2.0±0.3	11μm ≥ 50%
	IIR-SF2			※1: 146	250	143	※4: 2.66	4.13	1	2.0±0.3	11μm ≥ 50% 12μm ≥ 45%

○ Similar filters with () might not be manufactured by the maker at present.
○ OD is calculated value.

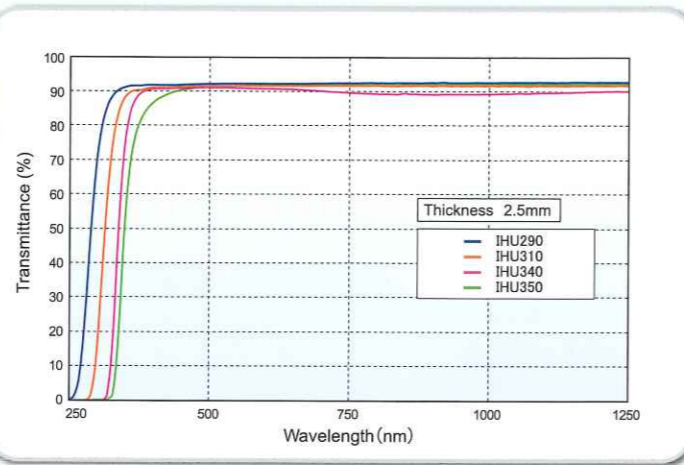
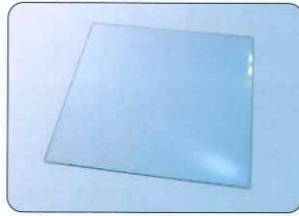
※1 α100-200 ※2 n(1545nm) ※3 n(546nm) ※4 n(10.6μm)

Filter Lineup

● UV transmitting filter

IHU series

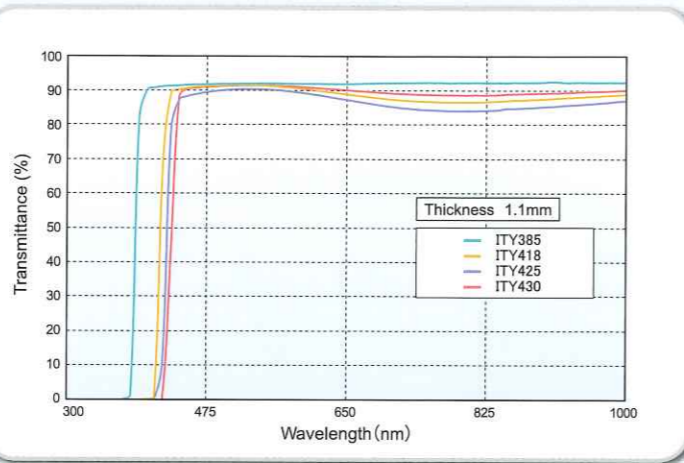
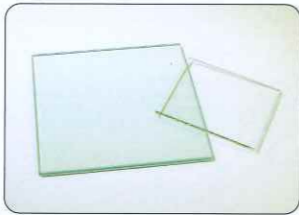
IHU series is a short-wavelength absorbing and UV transmitting filter with the transmission limit wavelength within the ultraviolet region and has good resistance to UV light.



● UV sharp cut filter

ITY series

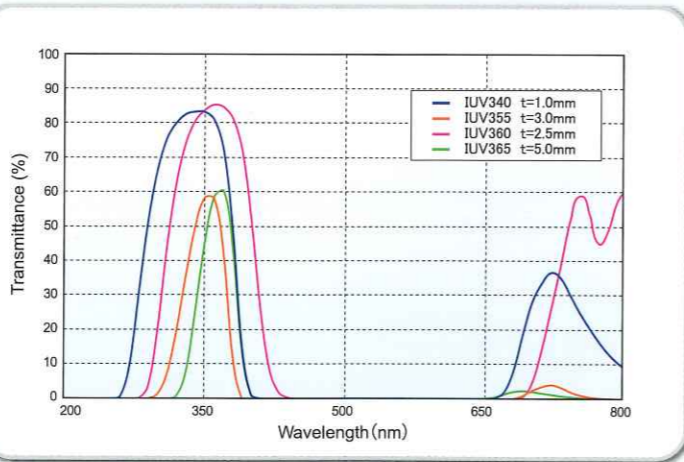
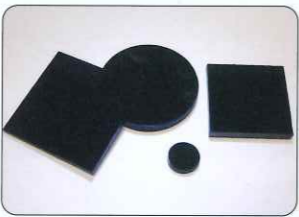
Compared to interference filters, this glass filter has a steep slope from the visible light. In addition, it is less affected by the angle of incidence and absorbs ultraviolet rays effectively.



● UV transmitting filter, Visible absorbing filter

IUV series

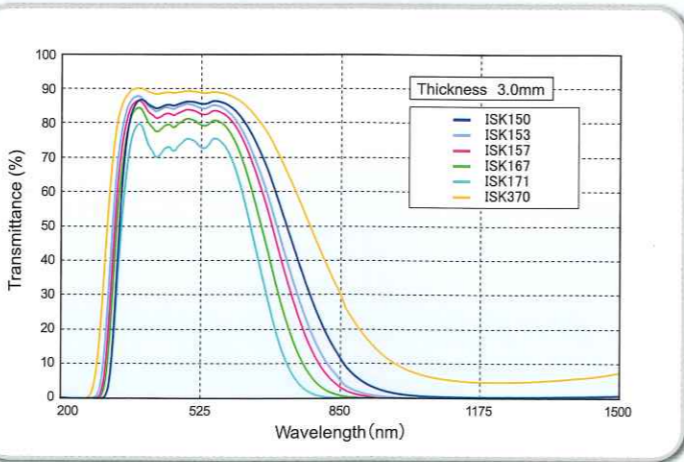
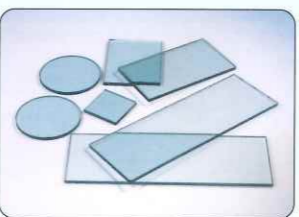
IUV series is band-pass filter designed to transmit in the UV region. They are designed to absorb visible enhance contrast for monochrome photography and to be used for color compensation.



● Heat absorbing filter

ISK series

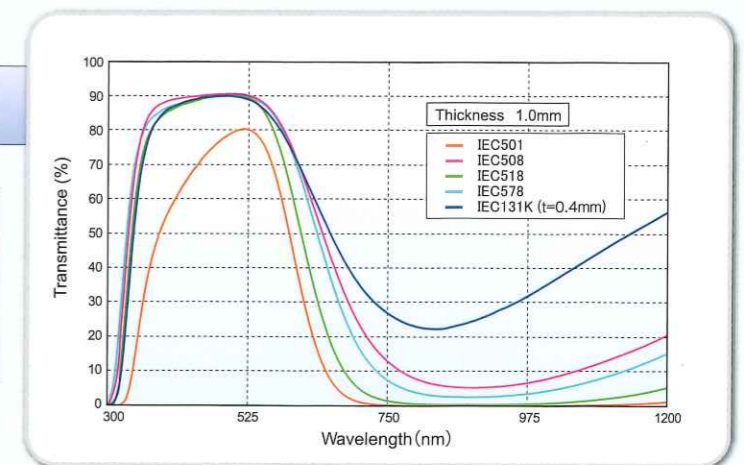
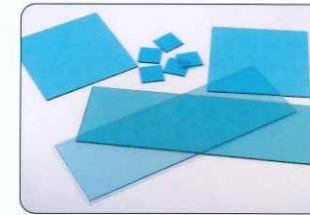
Designed to provide a very high transmission factor of visible light rays while cutting off much of the infrared light. ISK is the most used in the world for cutting of YAG laser.



● Blue filter (for color compensation)

IEC series

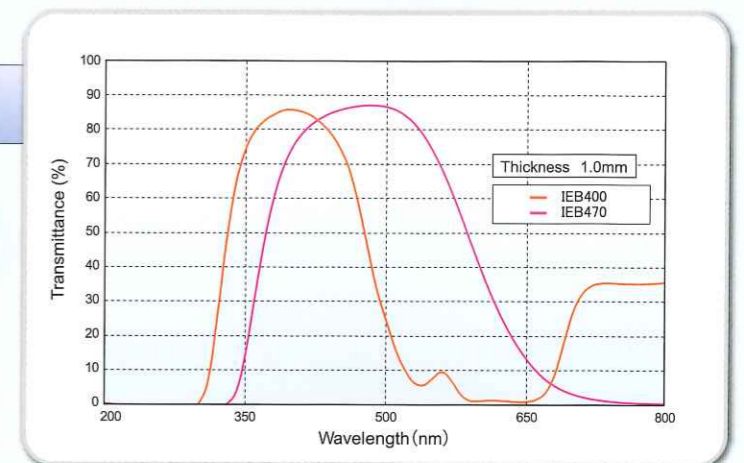
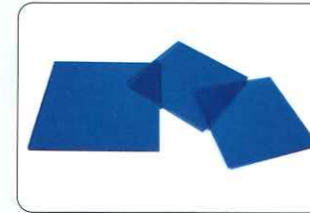
This glass has good transmission in the region of blue through green, and has a sharp decline in the red region. It is used as a IR cut filter.



● Blue filter

IEB series

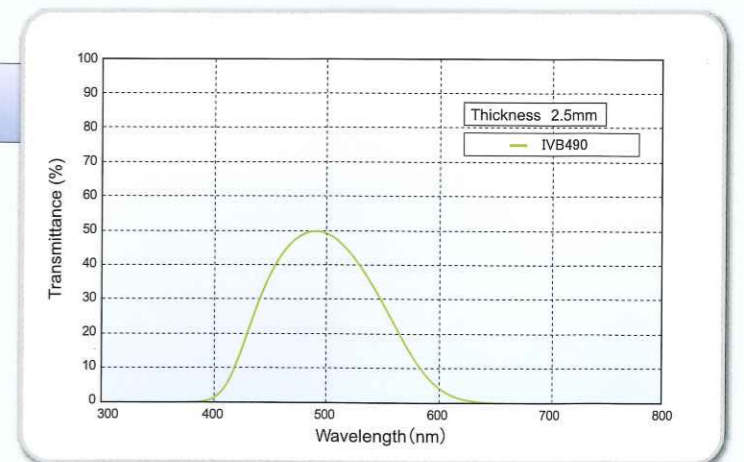
This glass has good transmission in the region of purple through blue, which is used as wavelength selection filters and for color compensation.



● Blue filter

IVB series

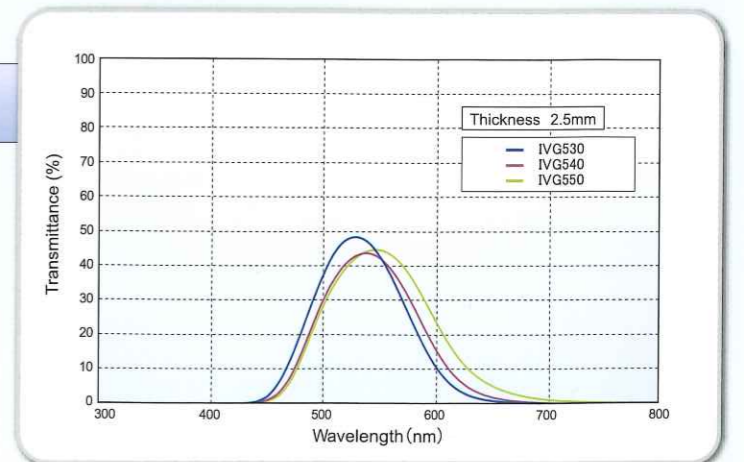
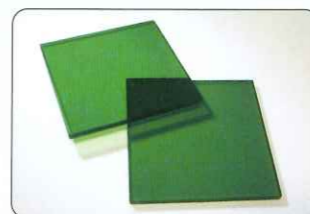
IVB series is band-pass filter designed to transmit in the blue region. They are designed to enhance contrast for monochrome photography and to be used for color compensation.



● Green filter

IVG series

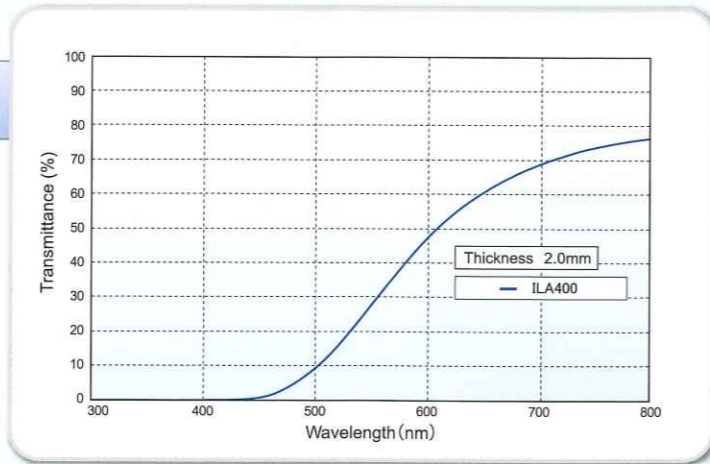
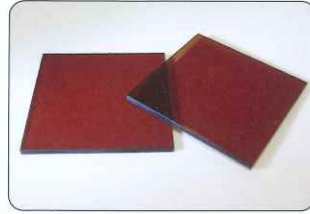
Based on the wavelength of green light range, this filter transmits comparatively narrow wavelength range.



● Light balancing filter (to decrease)

ILA series

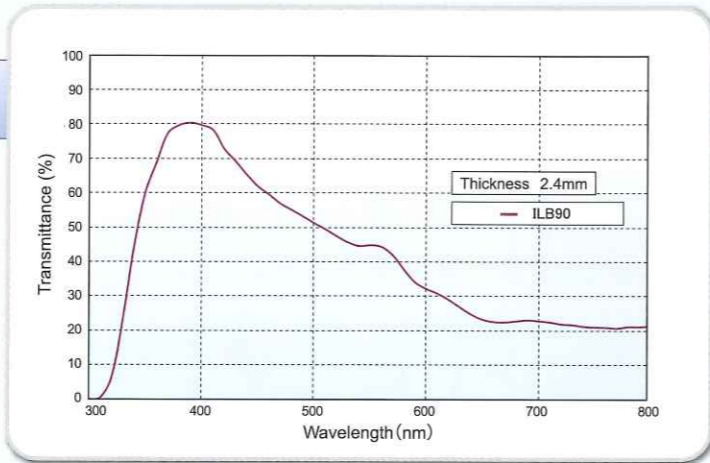
Light-balancing filters (amber) is used to decrease color temperature and enable the photographer to get warmer color



● Light balancing filter (to increase)

ILB series

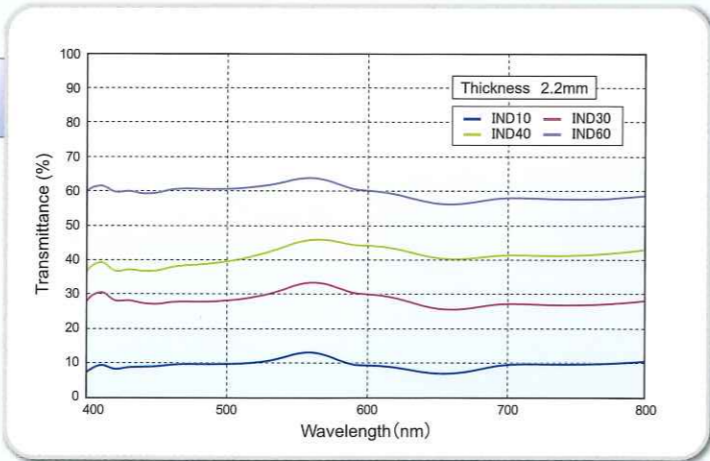
Light-balancing filters (blue) is used to increase color temperature and enable the photographer to make minor adjustments in the color quality of illumination to obtain cooler (bluer)



● Neutral density filter

IND series

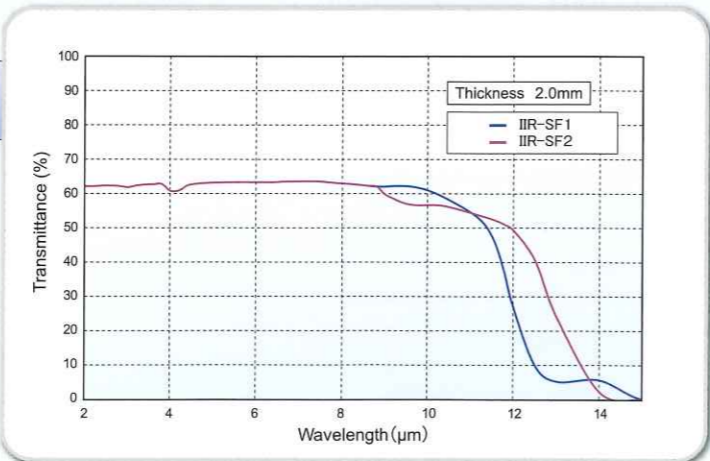
This glass filter is designed to provide an even spectral transmission over the visible spectrum. We can also modify desired densities.



● IR transmitting filter

IIR-SF series

IIR-SF series is the glass consisting mainly of sulfur and designed to transmit between 8 ~ 11 μm in the infrared. This glass is particularly useful for night vision cameras and sensors.



option

Thermal Temper Treatment

Thermal Temper helps to increase mechanical strength and resisting heat.

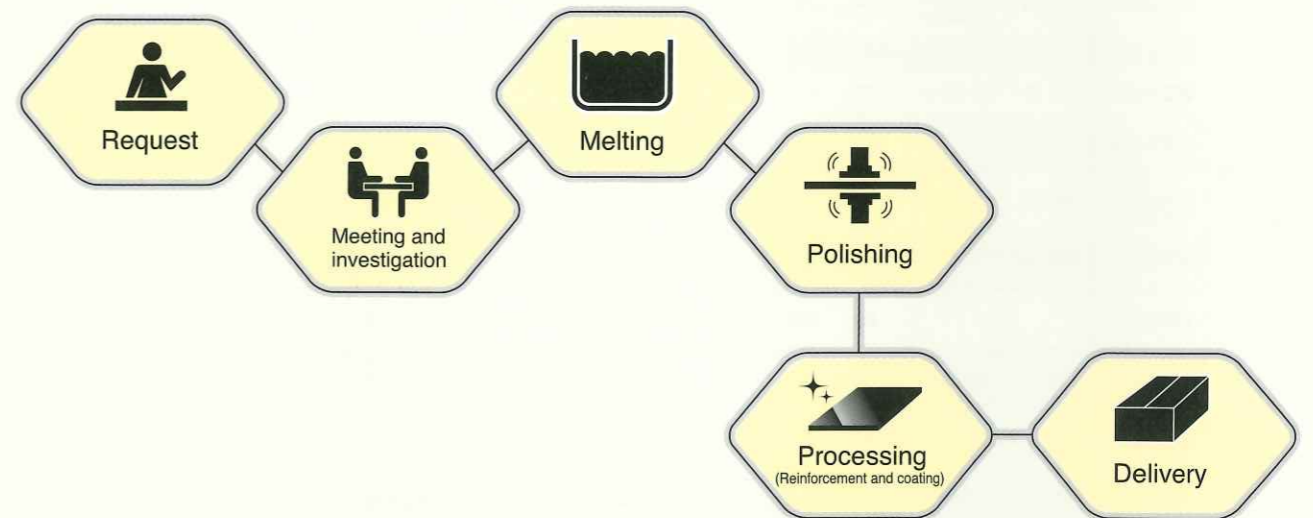
Coating

ISUZU GLASS can offer a variety of high quality coatings like UV-cut, IR-cut, Metal, MAR (Multi anti-reflection) and other optical coating.

Special Order product

ISUZU GLASS can develop new glass filters to your needs that are not listed in the catalog. Please feel free to inquire.

Process



Visit our website for more information.
Data sheet can be downloaded.

www.isuzuglass.com