

IHU250H Data Sheet

First version : 2019.07.22

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Manufacturer : Isuzu Glass Ltd

Material : IHU250H

Standard thickness : 1.0mm

Optical properties	Reflective index	n_d	1.50383	
		Abbe Value(v_d)	61.14	
		n_C	1.50129	
		n_d	1.50383	
		n_e	1.50579	
		n_F	1.50953	
		n_g	1.51393	
		n_i	1.52374	
		n_F-n_C	0.00823	
Thermal properties	Transmittance	T(Ave) 400-650nm	92.133 %	T=UV50% (λ) : 246.7(nm)
	Reflectance	R(Ave) 400-650nm	4.021 %	
	Softening point	Mp (°C)	563.0 °C	
	Transition point	Tg (°C)	466.8 °C	
	Yield point	At (°C)	525.3 °C	
	Expansion coefficient	($\times 10^{-7}/^{\circ}\text{C}$)	79.09	
	specific heat		0.86	J / (g K)
Mechanical properties	Thermal conductivity		0.93	W/m $\cdot$ k (k cal/mh $^{\circ}\text{C}$)
	Abrasion degree		-	
	Vickers hardness		440 HV 0.3	
	Young's modulus		5.68	Longitudinal sound velocity : 5520m/sec Transverse wave velocity : 3140m/sec
	10^{10}N/m^2			
	Poisson's ratio		0.26	
Reliability	Specific gravity		2.286	
	modulus of rigidity		2.25	
	10^{10}N/m^2			
	Hydrolytic	(Class)	3	
	Resistance			
	Resistance to acids	(Class)	3	
RoHS Compliant Hazardous Substances	Resistance to UV	(T : 400nm λ)	$\leq 1\%$	Attenuation Rate (High Pressure Mercury Lamp 1.5kw 1000Hr)

nm	Standard Material (T=1.0mm)		UV Radiation Test Result				
			Before test	1H	24H	300H	Attenuation Rate
	%T	T_i	%T	%T	%T	%T	Start→Finish
250	58.724	0.651	56.706	54.283	51.595	46.854	-9.01%
270	84.039	0.927	83.200	80.611	78.348	75.344	-5.83%
300	89.266	0.980	88.497	87.549	86.669	84.371	-2.07%
310	89.979	0.985	89.289	88.698	88.375	85.970	-1.02%
320	90.668	0.992	89.976	89.328	89.157	86.771	-0.91%
330	90.960	0.994	90.375	90.182	89.596	87.590	-0.86%
350	91.543	0.999	92.080	90.908	90.551	88.254	-1.66%
400	91.816	0.999	92.238	91.939	91.438	89.816	-0.87%
500	92.094	0.998	92.536	92.323	92.022	90.984	-0.56%
600	92.255	0.998	92.588	92.527	92.312	91.521	-0.30%
800	92.403	0.998	92.587	92.728	92.489	91.812	-0.11%
1000	92.438	0.997	92.228	92.845	92.657	92.100	0.47%
1200	92.455	0.996	92.423	93.138	92.715	92.367	0.32%
T=50%(λ)	246.7	244.9	247.5	248.4	249.4	251.3	-1.9 (nm)

