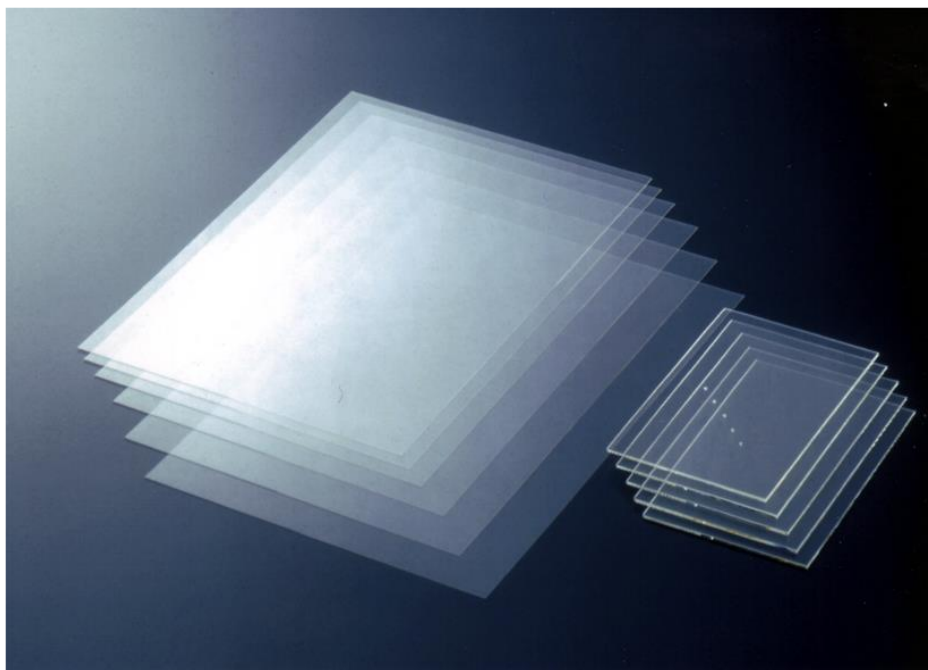


Segment : Substrate

MATSUNAMI GLASS IND., LTD.

Products : 709 (Cover for CCD)

7622 (High expansion)



### < Characteristics >

Product name	709
Refractive index (nD)	1.506
Expansion coefficient $\alpha$ [10-7/°C]	64 (100/300)
Transition point Tg [°C]	570
Deformation point At [°C]	615
Softening point Ts [°C]	735
Knoop hardness Hk	530(100g/15sec)
Density [g/cm <sup>3</sup> ]	2.43
Color	Achromatic
Composition type	Borosilicate
Young's modulus[103kg/mm <sup>2</sup> ]	7.27
Poisson's ration	0.22
RoHS regulated substances	Not contained
Halogenated substances	Not contained
Antimony compound	Not contained

Product name	7622
Refractive index (nD)	1.517
Expansion coefficient $\alpha$ [10-7/°C]	120 (100/300)
Transition point Tg [°C]	526
Deformation point At [°C]	564
Softening point Ts [°C]	670
Knoop hardness Hk	505(100g/15sec)
Density [g/cm <sup>3</sup> ]	2.53
Color	Achromatic
Composition type	Borosilicate
Young's modulus[103kg/mm <sup>2</sup> ]	5.70
Poisson's ration	0.29
RoHS regulated substances	Not contained
Halogenated substances	Not contained
Antimony compound	Not contained