



Glass substrate for DWDM

Bandpass Filters for DWDM have to perform low thermal shift of transmission peak wavelength. We have developed the glass substrate with high internal transmittance at $1.55 \mu\text{m}$ and optimum thermal expansion, high Young's modulus.

Properties		Unit	K-LC10	K-LC20	K-LC30	K-LC40
Thermal Expansion	-30~70°C	$\times 10^{-7} / ^\circ\text{C}$	95	103	103	109
	100~300°C		119	130	133	139
Vickers Hardness Hv		kgf/cm ²	640	551	606	587
Young's Modulus		GPa	93.2	79.4	80.1	88.2
Transformation Point T _g		°C	522	440	445	484
Water Resistance R _w			1	2	2	1
Acid Resistance R _a			1	1	1	1
Specific Gravity S. g.		g/ml	3.01	2.79	2.89	2.91
Internal Transmittance	1.55 μm	%T(1mm)	99.9	99.9	99.9	99.9
Refractive Index	1.55 μm		1.687	1.553	1.563	1.659

- Measured at room temperature except thermal expansion.
- These glasses are of lead and arsenic free materials.
- All data are subject to change without notice.

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