

極低熱膨張石英ガラス

Ultra Low Thermal Expansion Silica Glass

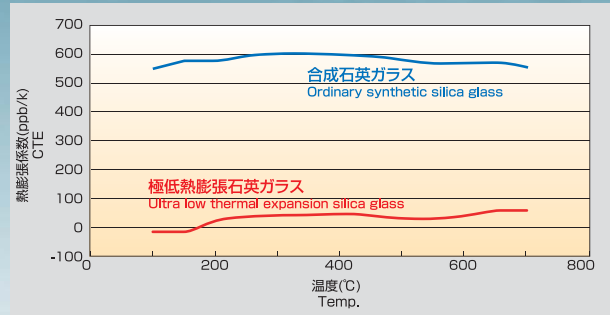
特長 Features

- 熱膨張率が100ppb/K以下の石英ガラスです
100ppb/K (or less) of CTE* at high temperature region.
- 室温付近ではゼロ熱膨張です
Almost zero CTE* at room temperature.
- 可視及び赤外領域で高透過率性を有します
Exhibits high optical transparency in the visible and infrared region.
- 機械特性・熱特性は石英ガラスとほぼ同一です
Thermal and mechanical properties are almost the same as that of ordinary silica glass.

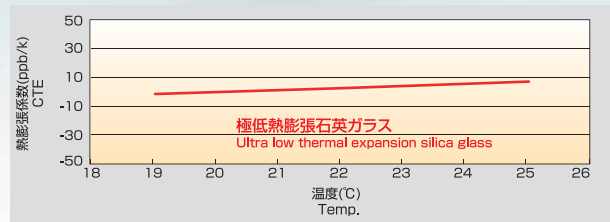
*CTE= coefficient of thermal expansion

熱特性 Thermal properties

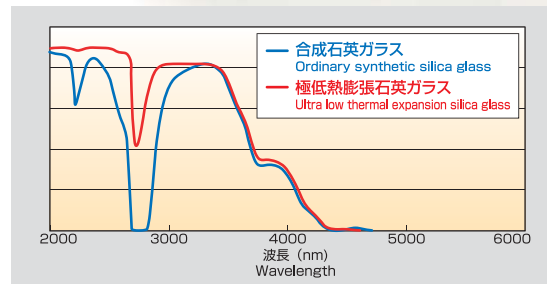
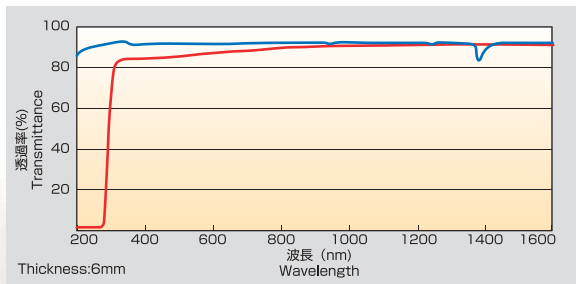
高温域の熱膨張係数 CTE at high temperature region



常温域の熱膨張係数 CTE at room temperature region



光学特性 Optical properties



機械特性 Mechanical Properties

		合成石英ガラス Ordinary synthetic silica glass	極低熱膨張石英ガラス Ultra low thermal expansion silica glass
かさ密度 Bulk density	g/cm ³	2.2	2.2
ビッカース硬度 Vickers hardness	GPa	6.9	6.1
ヤング率 Young's modulus	GPa	72	68
剛性率 Rigidity	GPa	31	29
ポアソン比 Poisson's ratio	-	0.17	0.18
熱伝導率 Thermal conductivity	W/m·K	1.42	1.30
熱拡散率 Thermal diffusion coefficient	cm ² /s	0.0087	0.0085

本資料の数値は参考値で、規格値(保証値)ではありません。
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