



**Opaque  
Quartz  
Glass**

**DATASHEET**

### IMPURITY LEVEL (TYPICAL VALUE, UNIT:PPM)

Type	Al	B	Ca	Co	Cu	Fe	K	Li	Mg	Mn	Na	Ni	Ti	Zr	OH
OQ01	8	0.10	0.33	0.10	0.10	0.15	0.10	0.10	0.10	0.10	0.10	0.10	1.33	0.96	170

### MECHANICAL PROPERTY

Item	Density	Bubble diameter	Bending strength	Vickers hardness
Unit	g/cm <sup>3</sup>	μm	MPa	MPa
OQ01	2.1 ~ 2.15	≤ 100	42 ~ 68	8900

### THERMAL PROPERTY

Item	Strain Point	Annealing Point	Softening Point	Coefficient of expansion 30~600°C	Specific heat 20°C	Thermal Diffusivity 20°C	Thermal conductivity 20°C	Viscosity 1200°C
Unit	°C	°C	°C	x 10 <sup>7</sup> / °C	J/kgK	x 10 <sup>7</sup> m <sup>2</sup> /s	W/mK	泊
OQ01	1080	1160	1630	6.4	749	8.4	1.24	

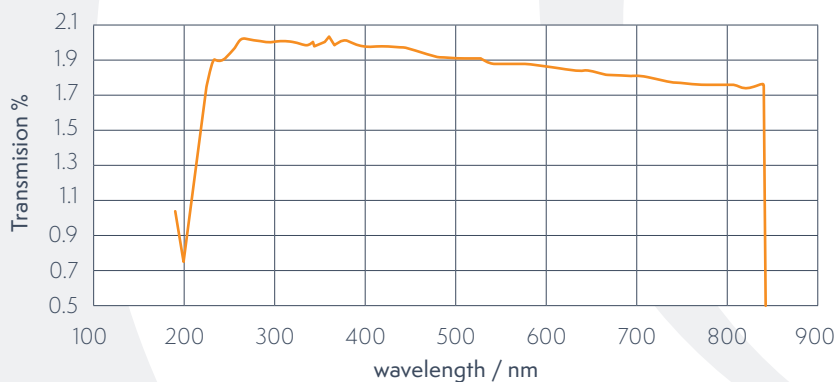
### ELECTRICAL PROPERTY

Item	Dielectric constant 500 MHz	Dielectric loss factor 500 MHz	Dielectric breakdown 50 Hz, 20°C
Unit		x 10 <sup>3</sup>	V/mm
OQ01	3.7	<1	25500

### CHEMICAL PROPERTY

Item	Solution: HF 10wt% 25°C, Etching time: 3 hours		Solution: KOH 10wt% 25°C, Etching time: 72 hours	
	Fire polished surface	Ground surface	Fire polished surface	Ground surface
Unit	μm/min	μm/min	μm/h	μm/h
OQ01	0.07	0.1	0.002	0.005

### TRANSMISSION



This quartz glass is made by flame fusion of high purity crystalline silica sand. It scatter the micro sized pores in the glass.

**Feature:** High purity, excellent heat resistance and light shielding. The micron sized pores has large surface area, that make it more efficient in defuse of heat irradiation in quartz glass, thus increase the heat irradiation shielding.

**Main application:** The products are widely used in semiconductor, solar and other heat isolation.