



TOQUARTZ
Tech Specifications

TOQUARTZ®

Quartz Furnace Door

Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® QUARTZ FURNACE DOOR

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Quartz Furnace Door with fast delivery and consistent quality.



Product Overview

TOQUARTZ® High-purity quartz furnace doors designed for diffusion furnaces, annealing furnaces, and oxidation furnaces, widely used in the photovoltaic, semiconductor, and advanced materials industries. Manufactured from high-purity quartz ($\geq 99.99\%$ SiO_2), these components offer exceptional thermal stability, low thermal expansion, and outstanding resistance to thermal shock and chemical corrosion.

TOQUARTZ® QUARTZ FURNACE DOOR



Key Features

- **High Temperature Resistance:** Withstands operating temperatures up to 1200°C
- **Thermal Shock Resistance:** Excellent resistance to thermal cycling
- **Chemical Resistance:** Superior resistance to acids, alkalis, and fluorine gases
- **Low Thermal Expansion:** Coefficient of $5.5 \times 10^{-7} / \text{K}$ ensures dimensional stability
- **High Material Purity:** 99.99% SiO_2 minimizes contamination risks
- **Customizable Design:** Available in various standard sizes or fully customizable

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Applications

- **Semiconductor Processing:**
Oxidation and annealing furnaces
- **Photovoltaic Manufacturing:**
Diffusion furnaces for solar cell production
- **Laboratory Research:** High-temperature experimental equipment
- **Materials Science:** Controlled atmosphere heating chambers
- **Industrial Heat Treatment:**
Specialized thermal processing equipment



TECHNICAL SPECIFICATIONS

Property	Value	Unit
Material	High-purity quartz glass	-
SiO ₂ Content	≥99.99	%
Maximum Working Temperature	1200	°C
Thermal Expansion Coefficient	5.5×10 ⁻⁷	/K
Thermal Conductivity	1.3	W/(m·K)
Density	2.2	g/cm ³
Tensile Strength	50	MPa
Dimensional Tolerance	±0.2	mm
Surface Finish	Fire polished	-
Chemical Resistance	Resistant to acids, alkalis, and fluorine gases	-



CUSTOMIZATION OPTIONS

TOQUARTZ offers comprehensive custom manufacturing services:

- Custom dimensions and wall thickness
- Specialized sealing configurations
- Integration of viewports or access ports
- O-ring groove designs
- Multiple port configurations

Our engineering team works directly with customers to develop solutions for specific requirements, from prototyping through volume production.



ABOUT TOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.

Contact Information

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TOQUARTZ® - Precision Quartz Solutions for Industry and Research

For technical specifications, custom requirements, or pricing information, please contact our sales team.