

# **Quartz Disc**

## **Product Catalogue**

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### WorKing

The fused quartz glass disc has an overall purity level of 99.99% and is composed of SiO<sub>2</sub>. It is a laser-cut product as per the dimensions. It also grinds well to smoothen the cut surface, which avoids the sharpness of the corner surface. Made from superior purity quartz sand & crystal flour and melted into quartz lump in a high-temperature furnace.

#### Product Series - Quartz-Disc

#### **Thermal Properties:**

- Thermal Conductivity 1.38(W/M °K)
- Coefficient Of Thermal Expansion 0.55(106/°C)
- Normal Operating Temperature (Continuous Usage) 1050 °C
- Normal Operating Temperature (Non-Continuous Usage) 1250 °C
- Strain Point 1075 °C
- Annealing Point 1180 °C
- Hot Processing Temperature 1700 2100 °C
- Devitrification Temperature Starting @ 1000 °C

#### **Specifications:**

- Density 2.2 gm/cc (ib/ft³)
- Surface Roughness < 5 nm
- Porosity 0%
- Hardness 600 Kg/mm<sup>2</sup>
- Thermal Conductivity 1.38 W/m °K
- Coefficient of Thermal Expansion 0.55 10-6/°C
- Specific Heat 740 J/kg. °k
- Dielectric Strength 30 Ac-kV/mm (volts/mil)
- Dielectric Constant 3.82 (@1MHz)

### **Size Variant**

Diameter: 25mm | 50mm | 75mm | 100mm

Thickness: 1mm | 2mm | 5mm

#### Important Note:

Customization can be provided as per size or specifications.

# **Applications**

- Aviation technology
- Laser technology
- Semiconductor industry
- Optical window manufacturing
- Infrared heater industry
- Corrosive gas/liquid filtration process
- Heat diffusion
- Flow regulation

### How to use?

#### **Storage And Stability:**

This product should be stored at room temperature and pressure, and its stability is indefinite. It should be placed in a clean environment.

#### **Precautions and Disclaimer:**

These products are for R&D and industrial use, not for drug, household, personal, or other uses.

#### **Packaging:**

It is supplied in bundles with highly-protective layers between individual discs within a light-protected, moisture-free, specially manufactured paper sheet.



### Handling

- When handling the disc, the researcher should use powder-free non-latex gloves,
   which should be held carefully.
- While experimenting, if researched using a substrate with bare hands, the chances
  of contamination of coated surface due to finger oil are very high. Therefore, it is
  advised to use nylon or polyester gloves.
- Each disc is well packed in moisture-free paper, so they should not rub each other.



Feel Free to Reach Us

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