TOQUARTZ

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## Tech Specifications

# Quartz Plate & Disc

Integrated Engineering & Agile Production

**for Demanded Specifications**

# TOQUARTZ®
# QUARTZ HEATING ELEMENT

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## Key Features

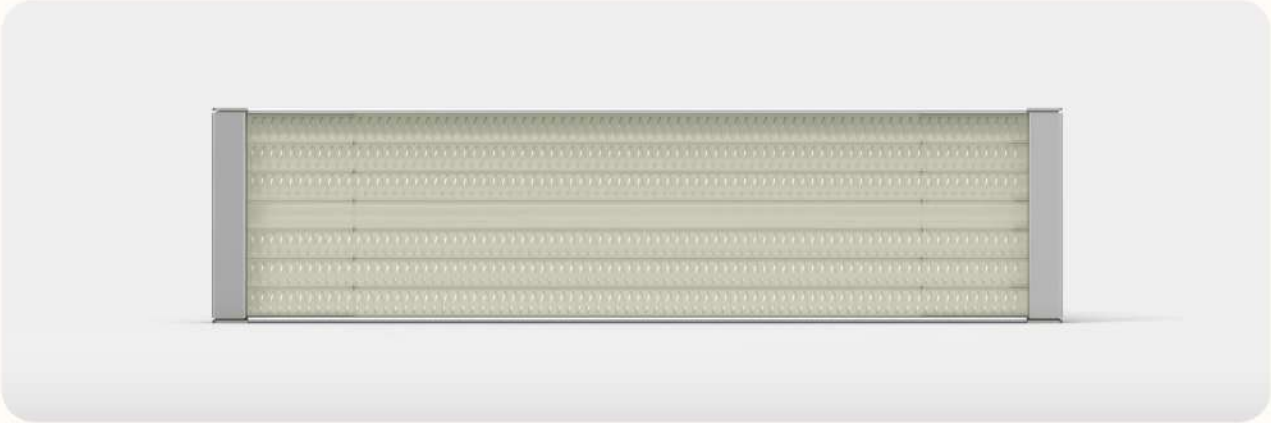
- High Temperature Resistance: Withstands extreme temperatures up to 1600°C
- Superior Corrosion Resistance: Highly resistant to acids, alkalis, molten salts, and fluorinated gases
- Rapid Thermal Response: Reaches operating temperature within 1 minute
- Excellent Thermal Conductivity: 120-160 W/m.K for efficient heat distribution
- Exceptional Electrical Insulation: Dielectric strength ⩾40kV/mm
- Customizable Dimensions: Available with precision tolerances (±0.2mm)
- Long Service Life: 10,000+ hours under normal operating conditions

# QUARTZ HEATING ELEMENT

## Applications

- Laboratory Equipment: Thermal analysis instruments, sample preparation systems
- Medical Devices: Sterilization equipment, incubators, sample processing
- Industrial Processing: Vacuum forming, paint drying, food processing
- Materials Processing: Plastic molding, adhesive curing, composite fabrication
- New Energy Technologies: Battery component drying, fuel cell manufacturing

# TECHNICAL PARAMETERS



- Rated Voltage (V): 380, 220, 110, 55 (Standard: 220V)
- Heating Power (W): 300-1000 (Standard: 325, 400, 500, 650, 800, 1000)
- Thermal Response: Within 1 minute
- Installation Type: Plug-in, typically non-stainless steel imported material
- Surface Temperature (°C): Low: 100-460°C, Medium: 500-580°C, High: 700-1100°C
- Spectral Range (μm): 2.5-6
- Spectral Emissivity: 0.92 (at wavelengths 4-8μm; 11-25μm)
- Thermal Conductivity: 120-160 W/m.K
- Thermal Expansion Coefficient: $1.1 \times 10^{-6}$/K
- Material Purity: 99.99% $SiO_2$ (standard), 99.995% $SiO_2$ (high-purity option)

# CUSTOMIZATION OPTIONS

## TOQUARTZ offers extensive customization capabilities to meet your specific requirements:

- **Dimensional Customization:** Custom sizes, thicknesses, and shapes
- **Surface Treatment Options:** Specialized surface finishes including polishing, etching, or coating
- **Performance Optimization:** Tailored thermal properties and power handling capabilities
- **Custom Mounting Solutions:** Specialized mounting features and connection points
- **Electrical Configuration:** Custom voltage, power ratings, and connection types
- **Small Batch Production:** Flexible manufacturing for specialized equipment

# SIZE CHART

## Quartz Heating Element

| Model | Dimensions (mm) | Power Range (W) | Wavelength Range (μm) | Average Weight (g) | Average Lifespan |
|---|---|---|---|---|---|
| AT-SY-J001 | 247x22.5x62.5 | 150 - 1000W | 1.5 - 8μm | 403g | 10,000 hours |
| AT-SY-J002 | 123.5x22.5x62.5 | 150 - 500W | 1.5 - 8μm | 210g | 10,000 hours |
| AT-SY-J003 | 247x62.5x59 | 150 - 1000W | 1.5 - 8μm | 403g | 10,000 hours |
| AT-SY-J004 | 123.5x62.5x59 | 125 - 500W | 1.5 - 8μm | 268g | 10,000 hours |

# QUALITY ASSURANCE

## All TOQUARTZ® heating plates undergo rigorous quality control testing including:

- Dimensional verification
- Surface inspection
- Thermal performance testing
- Electrical safety testing
- Material composition analysis

Contact Information

Email: info@toquartz.com
Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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