

## Technical Data Sheet

**Product Name:** Silicon Carbide Tube  
**Catalog No.:** SC0908  
**Appearance/Color:** Black Solid  
**Shape:** Tube  
**Purity:** 88-99.5%



### Properties

|                                               | Recrystallized SiC                    | Sintered SiC       | Reaction Bonded SiC |
|-----------------------------------------------|---------------------------------------|--------------------|---------------------|
| <b>Purity of Silicon Carbide</b>              | 99.5%                                 | 98%                | >88%                |
| <b>Max. Working Temp. (°C)</b>                | 1650                                  | 1550               | 1300                |
| <b>Bulk Density (g/cm<sup>3</sup>)</b>        | 2.7                                   | 3.1                | >3                  |
| <b>Appearance Porosity</b>                    | <15%                                  | 2.5                | 0.1                 |
| <b>Flexural strength (MPa)</b>                | 110                                   | 400                | 380                 |
| <b>Compressive strength (MPa)</b>             | >300                                  | 2200               | 2100                |
| <b>Thermal expansion (10<sup>-6</sup>/°C)</b> | 4.6 (1200°C)                          | 4.0 (<500°C)       | 4.4 (<500°C)        |
| <b>Thermal conductivity (W/m.K)</b>           | 35~36                                 | 110                | 65                  |
| <b>Main characteristics</b>                   | High temp. resistance.<br>High purity | Fracture Toughness | Chemical Resistance |

### Specification

| Form        | Dia. (mm) | Wall Thickness (mm) | Length (mm) |
|-------------|-----------|---------------------|-------------|
| <b>Tube</b> | 10-150    | 3-20                | 50-1500     |

Stanford Advanced Materials

By.....*Norman*.....