Norstel’s commercial product range includes 50.8mm, 76.2mm and 100mm diameter 4H Semi-Insulating Silicon Carbide (SiC) substrates that are available in on-axis as well as custom defined off-axis orientation. Norstel’s unique and patented HTCVD crystal growth technology is the key enabler to purer products combining high and uniform resistivity with a very low defect density.

STANDARD SPECIFICATION FOR 100MM DIAMETER ON-AXIS SEMI-INSULATING SiC SUBSTRATES:

- **Diameter:** 100.0 +0.0/-0.2 mm
- **Polytype:** 4H
- **Orientation (center point):** (0001) ±0.25 deg
- **Type:** Semi-insulating (HTCVD high purity)
- **Resistivity:** ≥ 1E7 Ohm·cm
- **Thickness:** 500 ± 25 µm
- **TTV:** ≤ 5 µm
- **LTV:** ≤ 2 µm
- **Warp:** ≤ 45 µm
- **MPD (3mm edge exclusion):** ≤ 5 cm⁻²
- **Surface finish (Si-face):** Epi-ready (CMP) Rq ≤ 0.2 nm
- **Surface finish (C-face):** Optical Rq ≤ 3.0 nm

Ref: 252-B-Q January 2017

For more information please contact Norstel sales!
email: sales@norstel.com

www.norstel.com

Semi-Insulating SiC Substrates