

COREMA – VT Specifications

1.1 Mechanical Setup

Components

Heated chuck	
Loading	Manual
Measurement box	Temperature shielded, light tight cover

Specifications

Wafer Thickness	250 μm – 2000 μm
Wafer Diameter	2 inch to 100 mm
Sample Surface	Etched or polished

1.2 Measurement System

Components

Charge Amplifier	Specially developed
Digitizer	OEM
Pulse Generator	OEM
Temperature control unit	OEM

Specifications

Measurement Range	RT to 600 K
Resistivity range	$1 \times 10^5 - 1 \times 10^{12}$ Ohm*cm
Probe Size	10 mm diameter
Edge Exclusion	2.5 mm
Arrhenius plot evaluation time	about 30 min (10 data points)

1.3 Measurement Control

Components

Computer	Pentium PC with CD-RW and NIC – Microsoft Windows
Software	Custom Windows based program

Specifications

Operation	User-friendly menu-driven selection and control of measurement routines Automated procedure to generate Arrhenius plot and to evaluate the activation energy
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