Non-Contact Sheet Resistance Mapper

DATA SHEET - EddyCus® TF map 2525 series

HIGHLIGHTS
- Contact-free & real-time
- Accurate high resolution mapping of sheet resistance for low and highly conductive thin films (Ohm/sq)
- Layer thickness mapping of metal films (nm)
- Layer and substrate thickness monitoring (µm)
- Sheet resistance mapping of encapsulated layers
- Multiple possibilities of analyzing the mapping by an easy-to-handle software

APPLICATIONS
> Architectural glass (LowE)
> Touch screens & flat monitors
> OLED & LED applications
> Smart-glass applications
> Transparent antistatic foils
> Photovoltaics
> Semiconductors
> De-icing & heating applications
> Batteries & fuel cells
> Packaging materials
DATA SHEET
EddyCus® TF map 2525 series – Sheet Resistance Mapping

Measurement technology
Non-contact eddy current sensor
e.g. foil, glass, wafer

Substrates
10 inch / 254 x 254 mm (larger on request)
2 mm edge exclusion for standard sizes

Max. scanning area

Edge effect correction / exclusion

Max. sample thickness/ sensor gap
2 / 5 / 10 / 25 mm (defined by the thickest sample/ application)

Sheet resistance range and accuracy
0.0001 – 10 Ohm/sq < 2% accuracy
10 – 100 Ohm/sq < 3% accuracy
100 – 1,000 Ohm/sq < 5% accuracy

Thickness mapping of metal films (e.g. Aluminum, Copper)
2 nm – 2 mm (in accordance with sheet resistance)

Scanning pitch
1 / 2 / 5 / 10 mm (other on request)

Measurement points per time (quadratic shape)
10,000 measurement points in 5 minutes
1,000,000 measurement points in 30 minutes

Scanning time
4 inch / 200 x 200 mm in 0.5 to 5 minutes (1 – 10 mm pitch)
8 inch / 200 x 200 mm in 1.5 to 15 minutes (1 – 10 mm pitch)

Device dimension (w/h/d) / Weight
23.6 x 9.05 x 31.5 inch / 600 x 230 x 800 mm / 27 kg

Available features
Metal thickness imaging
Anisotropy sheet resistance sensor
Optical transmission sensors at 632 nm wavelength

SOFTWARE & HANDLING – Sheet Resistance Analyzer 2.0