Efficient Testing Solutions

Data Sheet- EddyCus® TF map 5050 Series

Highlights

- Contact-free imaging
- High resolution imaging (25 to 1,000,000 points)
- Defect imaging
- Mapping of encapsulated layers

Parameters

- Sheet resistance (Ohm/sq)
- Metal layer thickness (nm, µm)
- Metal substrate thickness (µm)
- Anisotropy
- Defects
- Integrity assessment

Applications

- Architectural glass (LowE)
- Touch screens and flat monitors
- OLED and LED applications
- Smart-glass applications
- Transparent antistatic foils
- Photovoltaics
- Semiconductors
- De-icing and heating applications
- Batteries and fuel cells
- Packaging materials

Materials

- Metal films and meshes
- Conductive oxides
- Nanowire films
- Graphene, CNT, Graphite
- Printed films
- Conductive polymers (PEDOT:PSS)
- Other conductive films and materials

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Made and Engineered in Germany

Innovation Award by Free State of Saxony 2013
1st Place
### EddyCus® TF map 5050 Series

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Measurement technology</td>
<td>Non-contact eddy current sensor</td>
</tr>
<tr>
<td>Substrates</td>
<td>2, 4, 6, 8, 12 inch wafer</td>
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<tr>
<td>Max. Scanning area</td>
<td>20 inch / 508 x 508 mm (larger on request)</td>
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<tr>
<td>Edge effect correction / exclusion</td>
<td>2 - 5 mm edge exclusion for standard sizes</td>
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<tr>
<td>Max. Sample thickness / sensor gap</td>
<td>2 / 5 / 10 / 25 mm (defined by the thickest sample)</td>
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</tbody>
</table>
| Sheet resistance range accuracy can be optimized over sheet resistance decade within a customer specified range | Low: 0.0001 - 10 Ohm / sq; 2 to 7 % accuracy  
Standard: 0.01 - 1,000 Ohm / sq; 2 to 7 % accuracy  
High: 10 - 10,000 Ohm / sq; 3 to 7 % accuracy |
| Thickness measurement 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                | 10,000 measurement points in 5 minutes  
1,000,000 measurement points in 30 minutes |
| Scanning time                              | 8 inch / 200 x 200 mm in 0.5 to 5 minutes (1-10mm pitch)  
12 inch / 300 x 300 mm in 1.5 to 15 minutes (1-10mm pitch) |
| Device dimension (w/h/d) / weight          | 46.5 x 11.4 x 35.4 inch / 1,180 x 290 x 900 mm / 120 kg |
| Available features                         | Metal thickness imaging  
Anisotropy sheet resistance sensor  
Optical transparency |

Software and Handling - Sheet Resistance Analayzer 2.0