



Test System for Impedance Measurements of PCB structures

Technical Data

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|--|---|
| Measurement Channels | 180 |
| Measurement-, Stressvoltage | (1 ... 1000) V <ul style="list-style-type: none">adjustable in 1 V stepsmust be identical for all slotspolarity can be adjusted by soldering to the individual structures |
| Voltage Measurement Range | (0 ... ± 1000) V |
| Voltage Measurement Accuracy | ± 5 mV |
| Current Measurement Range | 20 mA to 0,1 pA |
| Current Measurement minimal Resolution | ±10 fA |
| Determination of Resistance Range | 10 MOhm to 100 GOhm |
| Determination of Resistance Accuracy | See Table |
| Limiting Resistance | 2,2 MOhm |
| Current Compliance | 120 mA |
| Measurement Time (adjustable) | (0,01 ... 99999) hours |
| Measurement Cable | RG316/U (50 Ohm, Teflon, -70°C to +200°C) |
| Connectors | SUB-D 8 x coax 1000 V, Test voltage 1800 V |
| Mains Voltage | (100 ... 240) VAC; 50/60 Hz |
| Power Consumption | ca. 300 VA |
| Safety Measures | Door Contact, Protection Cover Contact |
| Size | 770 mm x 800 mm x 553 mm (height x depth x width) |
| Weight | 30 kg |

Resistance measurement accuracy by test voltage = 100 V:

| Measurement Range | 10 | 100 | 1 | 10 | 100 |
|---------------------|------|------|-------|------|------|
| Unit | MOhm | MOhm | GOhm | GOhm | GOhm |
| $ \Delta R/R $ in % | 0,2 | 0,1 | 0,2 | 0,4 | 1 |
| ΔR absolut | 0,02 | 0,1 | 0,002 | 0,04 | 1 |

Measurement Channels:

- 30 slots, 6 structures each
- 30 PCBs, 6 structures each
- 15 slots, 12 structures each
- Slots can be allocated to up to 4 groups
- Each groups can have 6 or 12 channels

Failure Criterion:

- Multiples of Start Impedance
- Absolute Impedance Value
- Leakage Current
- Sort Circuit Condition ($R \leq 10$ kOhm), always been determined

Climate Chamber Control:

- Monitoring Temperature Levels
- Monitoring Moisture Levels