

PROFESSIONAL SHORT CIRCUIT LOCATOR



- To localise short circuit between footprint, wire or cable previously learned manually or with ATE.
- Function to check the connection in wiring and cable
- Low energy forced to preserve electronic components
- Operation method based on measurement of electrical resistance variation.
- Optimised high sensitivity algorithm using microprocessor

T27 localise the short circuit also in hard case:

- Between very large footprint
- Under the components
- Inside the hole on multilayer board
- Between wire of very long bus on board and mother board
- Between packed wiring on panels



T27 help you to eliminate expensive solutions

Manually or with automatic test systems is normal to found short circuit in production environment but not always easy is locate and eliminate it. Frequently occurs:

- Lose hours using magnifying lens
- Remove arbitrary components from the boards
- Remove wire and cabling in more points
- Use the drill to remove the metal hole in multilayer boards.
- ...and, sometimes, when you have spent too much time without results the last solution is to destroy the board!

High performance: The auto range system allow an high resolution with a large measurable resistance range but the best results are because the *microprocessor inside* is working with a special algorithm. These features are the ideal to operate in the hard cases such as power supply bus, with large wire, or data bus, with long net and with a lot of branch.

Self test: An internal circuit diagnostic is executed automatically at any system power on or selecting the TEST function.

Practical: The desk top design and the store pushbutton directly on the probe are very useful.

Safe: The instrument is qualified for use on board with active components because low voltage and low impulsive current are present on the measure probes. In any case the device under test must be switched off.

Functions: Three selectable functions. The "SHORT" function to locate the short circuit on wiring, the "BUZZER" function to check the electrical connection in wiring and cables, and the "TEST" function to execute the instrument self diagnosis.

SHORT CIRCUIT LOCATOR function

This is the function used to found the short circuit position. The location procedure begin contacting with the probe two arbitrary point of the shorted wires and storing this position. The instrument will indicate if you are going near or far to the short circuit when, moving one probe a time, will checked more points following the wiring layout. The indication of stored, near and far point are both acoustic and visual. The circuit under test must be switched off.

BUZZER function

This function allow to check the electrical connection in wiring and cables. When the probes are touching a wire the instrument indicate the electrical connection. The indication is different for 3 range of contact resistance $<50\Omega$, $<20\Omega$, $<2\Omega$. During the check the circuit under test must be switched off.

TEST function

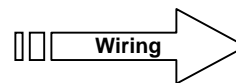
This self diagnostic function verify the instruments in case of failure.



TYPICAL APPLICATIONS

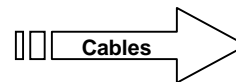
SHORT CIRCUIT LOCATOR function

- Printed circuits production (single/double layer, multilayer)
- Mounted boards repair
- Wired boards check and repair
- Cabled panels check and repair
- Laboratory



BUZZER function

- Manual cable assembly and/or check
- Manual check of mother boards cabled with wire wrap
- Cabled panels inspections
- Wired board inspections



Technical specifications

- | | |
|--|-----------------------|
| ○ Resistance Range | 1 mΩ ÷ >40Ω |
| ○ Output voltage (with float probes) | <0.5V |
| ○ Output current pulse (duty cycle <10%) | <100mA |
| ○ Probe cables length | 100cm |
| ○ Functions | Locator, Buzzer, Test |
| ○ External power supply (included) | 220Vac 12.5W |
| ○ T27 instrument dimension | 180x150x55 cm |
| ○ Weight (without power supply) | ca. 450g |

RETAILER STAMP

