KRM

PRODUCT INFORMATION
Cleaning Mats

- Extremely thin cleaning mat
- Easily affixed to support plate for reinforcement
- Two types of support plates available
- Outstanding durability and cleaning effect

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THIN CLEANING MAT FOR CONFIGURABLE DUMMY PC BOARDS

Application

Cleaning mats (KRM) are used to clean the tips of test probes which have accumulated residues during the test process. The new cleaning mat is only approximately 2 mm thick, is ideally designed to create dummy PCBs configured to the geometry of the device under test. The thin cleaning mat is affixed to a support plate, which provides reinforcement, with low pressure force using an adhesive film. Application-specific PCB dummies are configured then created from the layered materials by machining processes, such as milling or water jet cutting. If customisation accessories such as PCB supports and pushrods are used, holes for these must be cut out of the cleaning mat to ensure they meet the surface of the support plate. The dummy PCB is inserted into the test fixture instead of the DUT for the cleaning process. When the fixture is closed, the tips of the test probes are pressed into the cleaning mat and the specialised composition of the cleaning mats works to clean the test probe tips. The support plate is available in two materials: FR4 (1.5 mm thick) and CEM1 (1.0 mm thick).

Compatible test probes

This type of cleaning is particularly recommended for pointed, aggressive tip styles with self-cleaning properties, such as tip styles 01, 09, 15, 31, 77, 91, 97, and 98. Residues are dislodged from these these tip styles more effectively than from other tip style geometries.

Features

- Extremely thin cleaning mat
- Easily affixed to support plate to provide reinforcement
- Two support plate materials available
- Outstanding durability and cleaning effect
- Configured dummy PCBs to clean probes installed in test fixtures

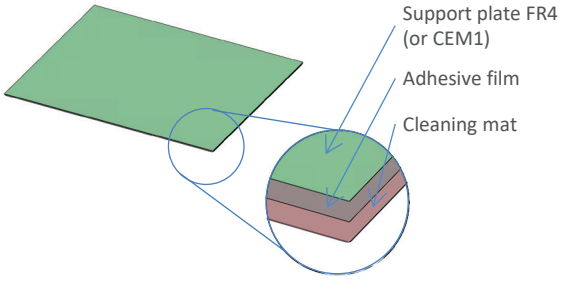
Technical data

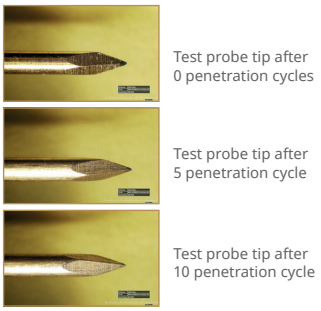
- Cleaning mat material:	silicone/quartz powder blend
- ESD properties of mat:	ESD charging possible
- Pressure force during bonding:	approx. 200 N/m²
- Typical probe pentration depth:	approx. 2.0 mm (dep. on spring force)
- Service life of mat (lab cond.):	approx. 1000 punctures on one spot
- Temperature range:	- 45 °C to + 180 °C

Scope of delivery

The individual components must be assembled upon delivery.

Design and installation example





Contaminated test probe, contacted on gold-plated PCB pads, after various cleaning stages

Note:
- Refer to the customising guidelines document **INFO 4584** to ensure correct installation of the cleaning mat. The cleaning mat is affixed to the support plate using approximately 200 N/m² and can be loaded immediately.
- The adhesive quality of the unused double-sided adhesive film is guaranteed by the manufacturer for up to 6 months.
- The cleaning effect and mechanical durability of the cleaning mat was tested in the INGUN laboratory using fully-automatic, computer-controlled endurance test stations. As the service life depends on several different factors, and in particular on the specific test application, INGUN does not guarantee the actual service life in the test field.
- The cleaning mat material contains compounds of silicone (SiO_2), aluminium (Al_2O_3), and titanium (TiO_2).

Ordering information

Part no.	Designation	Version	Outer dim. (WxDxH)	Tolerance
Cleaning mat (KRM), support plate, and adhesive film				
112766	KRM-550-450-02	Cleaning mat	550 x 450 x 2.30 mm	± 0.4 mm (high)
62766	FR4-BGe-Z 550x 450x 1,50	FR4 support plate, both sides sanded	550 x 450 x 1.50 mm	
62773	CEM1-Z 550x 450x 1,00	CEM1 support plate	550 x 450 x 1.00 mm	
112912	KUN-DKB-Z 550x 450x 0,14	Double-sided adhesive film (silicone/acrylat)	550 x 450 x 0.14 mm	± 2.0 mm (wide)