

Electrically conductive adhesive (Shieldokit)



Electrically conductive adhesive (Shieldokit) 3980

Electrically conductive glue/adhesive. Shieldokit creates an electrically and thermally conductive connection between components.

Shieldokit creates an electrically and thermally conductive connection between components (electrically conductive adhesive). One of the applications is EMI shielding. The conductive glue cures at room temperature and has excellent filling properties. The viscosity of conductive glue is comparable to peanut butter, so it can be used to fill in uneven surfaces.

The product consists of a two-component epoxy-based glue containing 80% silver. It is a paste which can be applied to metals (copper, aluminium, stainless steel, brass, etc.), ceramics and most plastics.

Structure

Shieldokit is a solvent-free, silver pigmented adhesive, based on a two-component epoxy resin.

Special characteristics

The kit creates a strong connection with excellent conductivity. It is designed to connect temperature-sensitive components.

Application

Shieldokit is designed to connect parts at temperatures between 20 °C and 80 °C. The adhesive can be applied with a dispenser or by screen printing. Tools have to be cleaned immediately after use.

Used for:

- Gluing components that cannot be soldered
- Connections that require excellent electrical conductivity
- Connections that have to be thermally conductive
- Repairing non-solderable components
- Gluing objects to a plastic enclosure where an electrically conductive linkage is needed
- Restoration of flat cables, SMD components, etc.

Cure instructions

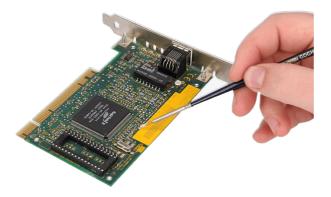
The product will cure at room temperature for 24 hours, or cure the adhesive in a oven at one of these time/temperature options:

15 min @ 65 °C

7 min @ 125 °C



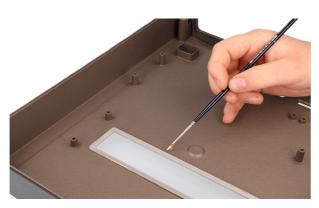
Electrically conductive adhesive (Shieldokit)



Electrically and thermally conductive connection between heat-sensitive components that cannot be soldered



The glue can be used for creating a conductive edge for convenient mounting



Electrically conductive connection between a conductive window and a plastic enclosure, ensuring full EMI-shielding integrity

Cured properties



Electrically conductive adhesive (Shieldokit)

Resistivity	7.0 x 10 ⁻³ Ω·cm
Hardness	73 D
Tensile Strength	13 N/mm²
Compressive Strength	39 N/mm²
Lap Shear (stainless steel) (aluminum)	3.8 N/mm ² 5.5 N/mm ²
Water Absorption	0.04 %
Outgassing @ 125 °C for 24 h	6.3 %
Glass Transition Temperature (Tg)	50 °C
CTE Prior Tg	54 ppm/°C
CTE After Tg	169 ppm/°C
Thermal Conductivity @ 25 °C	1.4 W/(m·K)
Service Temperature Range	-55-150 °C

Usage Parameters

Working Time	10 min
Service Cure	5 h @ 22 °C
Mix Ratio by Volume	1:1
Mix Ratio by Weight	1.04:1

Uncured Properties

Mixed Density	10 min
Shelf Life	2 years after production date
Viscosity @ 25 °C	(A) 1.000 Pa·s (B) 15.000 Pa·s

Part number Contains

3980 · 14 gr