

PPI THERMALLY CONDUCTIVE ADHESIVE TAPES

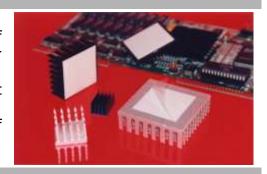
TC-150B • TC-250B • TC-500B • TC-1000B

Description

PPI TC family of pressure sensitive thermally conductive adhesive tapes are designed to provide preferential heat-transfer between heat-generating electronic components and cooling devices such as fans, heat sinks or heat spreaders. Developed for applications that require a combination of good thermal transfer, dielectric strength, adhesion & conformability. PPI TC products are supplied on a release paper carrier liner and covered with a filmic liner for ease of handling and application.

Main functions

- To provide a fast, reliable and clean method of attaching heat sinks or heat spreaders onto power components.
- To allow sufficient heat exchange between component and cooling mechanism.
- To provide excellent adhesion between a variety of substrates.



Applications

PCB Assembly

Mounting heat sink, fan or heat spreader to IC packages & components.

Application procedure

Recommended tape application temperature 20°C - 27°C Bonding surface must be clean.

Substrate surfaces should be clean and dry prior to tape applications.

Isopropyl alcohol (IPA) can be applied with a lint-free wipe or swab to remove contaminants such as dirt or fingerprints. Avoid further contact with the surface to be bonded by wearing suitable gloves. Allow the surface to dry for several minutes before applying the tape.

To avoid air entrapment during tape application apply even pressure by using a rubber roller or



squeegee to ensure smooth application of the tape to the component surface. The carrier liner can be removed after positioning the tape onto the first substrate or component.

Apply pressure to the assembly to ensure good adhesive wetting of both surfaces that have been bonded. Proper application of pressure (amount of pressure, time applied, temperature applied) will depend upon design of the parts to be joined.

Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warranties expressed or implied. The user shall determine the suitability of the product for the intended use and user assumes all risk and liability whatsoever therewith.



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PROPERTIES	PPI TC-150B	PPI TC-250B	PPI TC-500B	PPI TC-1000B	TEST METHOD
Base Tape	Filled Acrylic	Filled Acrylic	Filled Acrylic	Filled Acrylic	
Thickness	0.15 mm 6mil	0.25mm 10mil	0.5mm 20mil	1.0mm 40mil	BS 3924
Colour	White	White	White	White	
Tensile Strength (Kg/cm)	0.08	0.15	0.30	0.80	BS 3924
Elongation %	400	400	500	400	BS 3924
Peel Adhesion (Kg/25mm) 30min R.T.	1.2	1.4	1.5	1.7	BS 3924
Shear Adhesion Kg/cm ²	3.5	3.5	3.5	4.5	ASTM D-1002
Thermal Conductivity (W/m K)	0.5	1.0	1.0	1.0	DIN V 54462
Dielectric Strength (Kv)	3.5	6.0	8.0	8.0	ASTM D-149
Operating Temperature (°C)	-25°C to 130°C	-25°C to 130°C	-25°C to 130°C	-25°C to 130°C	
Flame Rating	V2	V0	V0	V0	UL 94
Interliners Both Sides	Release Paper/ Filmic Liner				

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