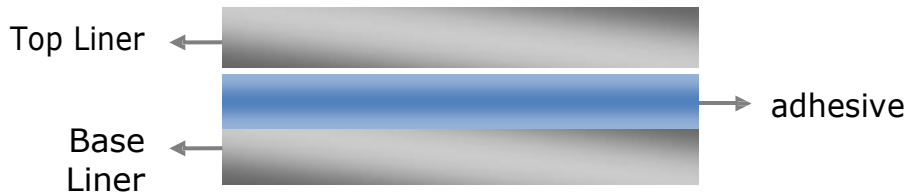




Description:

POLYONICS 950 is a thermally conductive, silicone pressure sensitive adhesive provided with two release liners.



Features:

- Flame retardant
- Thermally conductive (0.7 W/mK)
- Thin bond line
- Flame retardant
- ESD Safe – Low Charging
- REACH and RoHS compliant
- High bond strength
- Excellent Operating Temperature Resistance (~175C)

Applications:

Ideal for bonding materials that require heat transfer across a gap or laminate. Applications include, but are not limited to:

- Thermal interface materials
- Bonding metal joints for lighting assemblies
- Electric motor mounting structure.

Special Considerations:

- The surface on which the tape is to be applied should be clean, dry and free of any surface contamination, such as dust, oil or rust. Xylene would be a recommend solvent to clean the surface.
- When applying the adhesive, you must use significant nip pressure during lamination to increase the physical contact of the adhesive with the target surface.
- Pressure sensitive adhesives will provide stronger bonds to a warm surface, as compared to a colder one. The adhesive will 'flow' more readily, increasing the surface area and increasing the adhesion peel strength.
- All values shown are averages and should not be used for specification purposes. Adhesion and tack values have a 15% tolerance allotted to the values stated.
- Test data and test results contained in this document are for general information only and shall not be relied upon by POLYONICS customers for designs and specifications, or be relied on as meeting specified performance criteria.
- Customers desiring to develop specifications or performance criteria for specific product applications should contact Polyonics for further information



Technical Data

Property	Test Method	XA-1050	XA-1051
Thickness	ASTM D-1000		
	Liner (Top)	56um	56um
	Adhesive	38um	75um
	Liner (Bottom)	38um	38um
Adhesion¹	ASTM D-3330	>30 oz/in	>55 oz/in
	180 Peel @ 24 hour	- 2 mil polyimide backing from aluminum	
Lap Shear²	PSI @ 24 hrs	3	4.5
Probe Tack	80155	77 g/In	57 g/In
Thermal Conductivity	ASTM D5770	0.7 W/m-K	0.7 W/m-K
Thermal Impedance	ASTM D5770	0.2 K-in ² /W	0.3 K-in ² /W
Operating Temperature³	1000 hrs	200C	200C
Maximum Temperature⁴	Short Term (< 15 min)	Up to 350C	Up to 350C
	Long term (>6 hrs)	Up to 235C	Up to 235C
Low Charging (ESD)	Modified ESD Adv 11.2	<125 volts	<125 volts
Flamability⁵	UL94 Method	V0	V0
Shelf Life		1 year when stored below 80F & 60% RH	

Notes:

- 1 - Peel adhesion is with 2 mil polyimide backing from aluminum
- 2 - Lap shear is with steel plates
- 3 - Criteria for operating temperature is no significant change in thermal impedance.
- 4 - Maximum temperature is based minimal adhesion loss for dwell time.
- 5 - Flame testing performed at Polyonics, not recognized by UL.



POLYONICS

Technical Data Sheet

**950 Adhesive
Adhesive Transfer Tapes**

Polyonics Material Compliance

RoHS (Restriction of Hazardous Substances) EU Directive 2002/95/EC	Limits set forth in Directive 2005/618/EC amending Directive 2002/95/EC
REACH (Registration Evaluation and Authorization of Chemicals) EU Directive 1907/2006/EC	Limits set forth in Directive 1907/2006/EC Article 7 (2)
Halogen Free - Restriction use of Halogen (IEC 61249-2-21)	Limits set forth in International Electrochemical Commission

WARRANTY-LIMITATION

Polyonics' products are sold with the understanding that the Buyer will test them in actual use and determine for him/herself their adaptability to his/her intended uses. Polyonics warrants to the buyer that its products are free from defects in material and workmanship, but limits its obligations under this warranty to replacement of the products shown to Polyonics' satisfaction to have been defective, provided that the Buyer has complied with the handling, storage and shelf life requirements as specified by Polyonics in applicable materials specifications.

The above warranties extend solely to Buyer and all warranty claims must be made by the Buyer. Rework or Replacement shall neither exceed nor decrease the original warranty period. The term of all warranty periods shall not exceed thirty (30) days from the date of the original shipment.

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