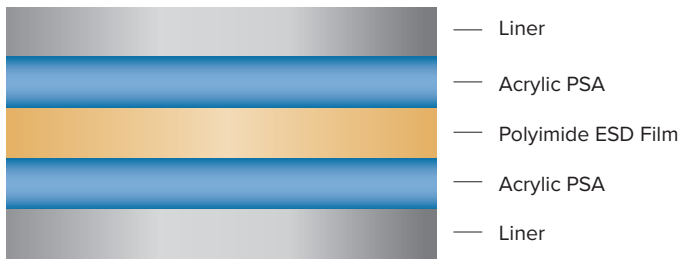


1 MIL POLYIMIDE ESD-SAFE TAPE

POLYONICS XT-652 is a double coated 1 mil (25 µm) die-cuttable amber polyimide ESD tape. It includes top and bottom layers of 1 mil (25 µm) high temperature, low tribocharging, acrylic adhesive and liners.

XT-652



FEATURES

- Low tribocharging PSA
- Complies with ANSI/ESD S.20.20
- REACH and RoHS compliant
- Dimensionally stable at high temperatures
- Heat, cold, solvent, chemical and voltage resistance
- High bond strength
- Thin conformal bond line

TECHNICAL DATA

Properties	Test Method	Average Results (Imperial Units)	Average Results (SI Units)
Thickness	ASTM D-1000		
	Film	1 mil	25 µm
	Adhesive (Both Sides)	2 mil	50 µm
	Total	3 mil	75 µm
Dielectric Breakdown	ASTM D-149	> 7.6 kV/mil	> 299 kV/mm
Adhesion	ASTM D3330		
<i>Stainless Steel</i>	20 Minute Dwell	≥ 27 oz/in	≥ 30 N/100 mm
	24 Hour Dwell	≥ 30 oz/in	≥ 33 N/100 mm
Low Tribocharging	Polyonics 80331	< 100 Volts/in ²	
		1 in x in area	25 mm x 25 mm area
Shear	SAFT ASTM D4498	> 392 °F	> 200 °C
Tack	80155	≥ 1000 g/in	≥ 39 g/mm
Out-gassing	ASTM E 595-07 24 hours at 257 °F (125 °C)	TML = 0.81%, CVCM = 0.02 % WVR = 0.71 %	
Temperature Range	Short term	-40 °F to 572 °F	-40 °C to 300 °C
Shelf Life	1 year below 80 °F (27 °C) and 60% R.H.		

APPLICATIONS

- Bonding static sensitive devices (SSD) that will be exposed to high temperatures and harsh environments.
- Mounting devices to PCBs where static charges need to be minimized
- Electrical insulation and/or isolation between flex circuits, coils, transformers
- Circuit board insulation

SPECIAL CONSIDERATIONS

- Intended for industrial use only
- The surface on which the tape is applied should be clean, dry and free of any contamination, such as dust, oil or rust. Isopropyl alcohol is recommended to clean the surface.
- Use firm pressure when applying tape to increase the physical contact of the adhesive with the surface.
- Pressure sensitive adhesives will provide stronger bonds to warm surfaces by increasing adhesive flow and peel strength.

All SI units are mathematically derived from U.S. conventional units.

NOTE: 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.

References: ASTM: American Society for Testing and Materials (U.S.A.) SI: International Systems of Units.

POLYONICS MATERIAL COMPLIANCE

RoHS (Restriction of Hazardous Substances) EU Directive 2002/95/EC	Limits set forth in Directive 2011/65/EU
REACH (Registration Evaluation and Authorization of Chemicals) EU Directive 1907/2006/EC	Limits set forth in Directive 1907/2006/EC Article 7 (2)

WARRANTY-LIMITATION

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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.

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