

Product Data Sheet

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540 1 mil White Polyimid STATIC DISSIPATIVE

Liberty Marking # 540 is a special 1 mil (25μ) polyimide film with a high-temperature permanent pressure sensitive acrylic adhesive and a high opacity, gloss white topcoat specifically designed for thermal transfer printing. Using a 1 mil vs. a 2 mil polyimide film base offers polyimide thermal performance at less cost.

The XF-781 topcoat, in combination with the appropriate thermal transfer ribbon, passes the requirements of MIL-STD-202G, Notice 12, Method 215K and MIL-STD-883E, Notice 4, Method 2015.13. The print resists smearing, even when the board and label are directly removed from a reflow or wave solder environment. Preheating the labeled product can further enhance print permanence in the case of extreme solvent and/or abrasion exposure, although this is not typically required for board processing applications.

Moreover, when the label is peeled from its release liner, less than 100 volts per square inch of electrostatic charge is generated, making it safe to use in a static free work environment, per EIA 625 and 541.

Applications:

- Liberty Marking 540 is specifically designed for high-temperature-lead-free solder applications.
- It is the ideal label to withstand surface mount board processes, on either the top or bottom side of the board. It can also be used on the top side of the board in mixed processes and is recommended for the bottom side which is directly exposed to the wave solder environment.
- 1 mil polyimide is perfect in applications where low-profile labeling is required such as silk screening or stacking.
- Liberty Marking 540 is particularly useful in manufacturing processes where dimensional stability of the label is critical.
- IC labeling for work in process, permanent ID & warrantee labeling
- Product ID, asset tracking
- Anywhere a label will be exposed to extreme temperature resistance

Special Considerations:

- The surface that you want to label should be clean, dry, and free of any surface contamination, such as dust, oil, or rust. Isopropyl alcohol would be a recommend solvent to clean the surface.
- When you apply the label, you must use firm pressure to increase the physical contact of the adhesive with the surface of the product.
- 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.
- Liberty Marking 540 topcoat & print should not be contacted while exposed to elevated temperature.
- All values shown are averages and should not be used for specification purposes. Adhesion and tack values have a 15% tolerance allotted to the above values stated.

Product Performance and Suitability

All of the descriptive information and recommendations for the use of Liberty Marking Systems products are to be used only as a guide. The furnishing of such information and recommendations shall in no event constitute a warranty of any kind by Liberty Marking Systems. All purchasers of Liberty Marking Systems products shall independently determine the suitability of the material for the purpose for which it is purchased. No distributor, salesman, or representative of Liberty Marking Systems is authorized to give any warranty, guarantee, or to make any representation in addition or contrary to the above.