Tflex™ HP34

Application Note

Shelf life:

Shelf life for Tflex™ HP34 is 1 year from date of shipment at the storage conditions specified below.

Storage:

Material should be stored in a clean dry place (< 50%RH) at a temperature between 15°C and 35°C. Please store in original product packaging until ready for use.

Notes:

- Optimal effective thermal conductivity for Tflex™ HP34 is achieved with a deflection <30%. Thermal resistance is superior and will remain constant at different pressures or different deflection percentages in application.
- Tflex™ HP34 is designed to be easily deflected in application and can therefore result in unwanted stretching or compression when handling. Care should be taken when handling to minimize unwanted deformation.
- A light, visible and consistent residue on the liner is normal for this material and it will not affect the thermal performance.
- Liner for Tflex™ HP34
    - Top liner: 1mil PET printed with Laird logo
    - Bottom liner: 2mil PET
    - Additional liner options are available upon request.

Part Sizes:

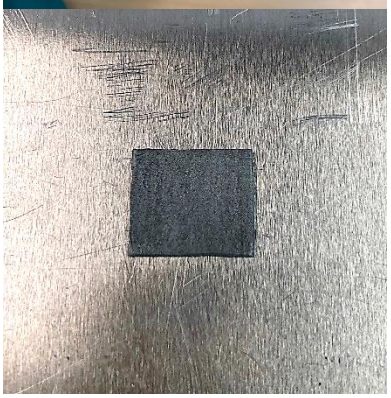
- 1.0 mm (0.040”) to 5.0 mm (0.200”) thick material available in 0.25mm (0.010”) increments.
- Available in standard sheet sizes of 76.2 mm x 127 mm (3” x 5”) or custom die cut parts
- Minimum part size is 10 mm x 10 mm (0.394” x 0.394”)

Appearance:

- The surface of Tflex™ HP34 has a layered and striped appearance which results in color variation across the part. This is normal and does not impact the performance.

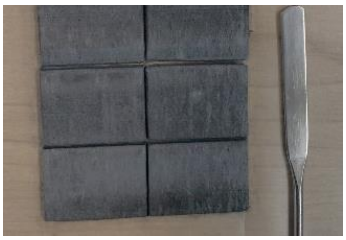
Application instructions:

1. For both cut through and Kiss cut parts, begin peeling at corner of sheet and remove the top liner in one swift, consistent motion.
2. Remove the Tflex™ HP34 material from the bottom liner by bending back the bottom liner. Place the pad onto the desired substrate. Take extra care and peel slowly as the freestanding pad may deform easily
3. For kiss cut parts, cover the exposed gap filler or continue the assembly process to avoid contamination of the surface with dust and debris.
4. If using a cut through part, the bottom release liner may remain intact while the material is applied to the desired substrate to aid in easier removal and prevent deformation or to act as a protective cover and be removed at a later time.



Part removal instructions using a tool:

1. With a converted part lying flat on a solid surface, remove top liner.
2. While holding the part down to the table, place a thin steel tool on an angle and slowly slide the tool underneath the entire part.
3. When the tool is at or very close to the cut edge mark, reduce the angle of the tool and raise the tool away from the pad. Lift the part away from the bottom liner while supporting the complete part. Or lift the part way using a flat tip tweezer from the bottom liner.
4. Tool size may need adjusted based on the part geometry.




Storage after applied to a component:

Keep the thermal solution with the component covered in a clean dry place (< 50%RH) at a temperature between 15°C and 35°C.

Separation of components and removal of Tflex™ HP34

- For the removal, the thermal solution can be detached at room temperature or elevated temperature. It is preferred to detach the thermal solution while it is warm (50 °C or above)
- Once components have been separated, lift away the Tflex™ HP34 pad. A light, visible and consistent residue on the component is normal for this material and it will not affect the performance. Then clean residue with a dry cloth. If there is remaining residue, clean with a cloth dampened with a solvent such as isopropyl alcohol or Isopar H.