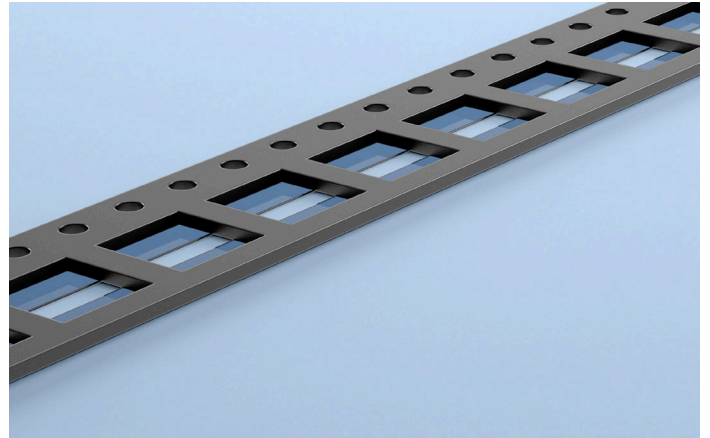




Surftape® is a unique form of punched carrier tape ideal for bare die or small devices where protection and placement are critical. Components are placed on a wafer film backing within a compartment boundary. Unlike conventional embossed tape, the compartment does not have to be sized to the component, eliminating the need for custom carrier tape tooling. Traditional cover tape is also not required. Both elements reduce inventory management costs.

Surftape is also an excellent solution for shipping prototypes or early production runs. Since Surftape comes in standard sizes there is no long wait for tape design, custom tooling and manufacturing leadtimes.

- > Ideal for bare die, chip scale packages, MEMs, LEDs, and micro thin components
- > Devices are held safely in place - preventing corners, edges and surfaces from contacting the packing material
- > Wafer film base secures the devices in the exact position they are placed, no theta correction is required
- > One tape size can fit a multitude of component sizes
- > No tooling cost or large minimum order costs
- > Supporting semiconductor industry packaging standards:
 - > EIA 481 & EIA 747
 - > IEC 60286-3
 - > JIS C0806



Material Properties

| Property | Value | Test Method |
|--|---|-------------|
| <u>Thickness</u> Polystyrene Film Adhesive Tape Total | 0.64 & 0.84mm 0.075mm 0.715 & 0.915mm | - |
| Specific Gravity | 1.12g/cc | ISO 1183 |
| Elongation | 40% | ISO 527 |
| Tensile Strength | 29 Mpa | ISO 527 |
| Tensile Strength | 29 Mpa | ISO 527 |
| Heat Distortion | 85°C (185°F) | ASTM D1525 |
| Surface Resistivity | ≥10E2, ≤10E4 Ohms/Sq | IEC 60093 |

Note: The values presented for this product are typical laboratory data and may be changed without notice.

Adhesive Tape Material Properties

| Property | Value | Test Method |
|-------------------------------------|------------------|--------------------|
| Film Type | PVC Film | - |
| Adhesive Type | Acrylic-based | - |
| Impurities Content | <3 ppm | Ion Chromatography |
| Surface Resistivity (adhesive side) | 10E12 Ohm/Sq | IEC 60093 |
| Color | Blue Transparent | Visual |

Note: The values presented for this product are typical laboratory data and may be changed without notice.

Surftape Sizes

| Part Number | Width / Pitch | Max device size |
|-------------|---------------|-----------------|
| ST84 | 8mm / 4mm | 2.7 x 2.7mm |
| ST124 | 12mm / 4mm | 2.0 x 4.4mm |
| ST128 | 12mm / 8mm | 5.0 x 5.0mm |
| ST1612 | 16mm / 12mm | 9.0 x 9.0mm |

Shelf Life and Storage

Surftape® should be used within 18 months of the date of manufacture. Store this product in its original packaging in a climate-controlled environment where temperatures range from 15°C - 30°C (59°F to 86°F) and with relative humidity 40 - 75%. Allow the product to stabilize at room temperature prior to use.

Camber

The Advantek homogeneous CPS55 polystyrene meets EIA-481-D; not greater than 1mm in 250 linear millimeters.