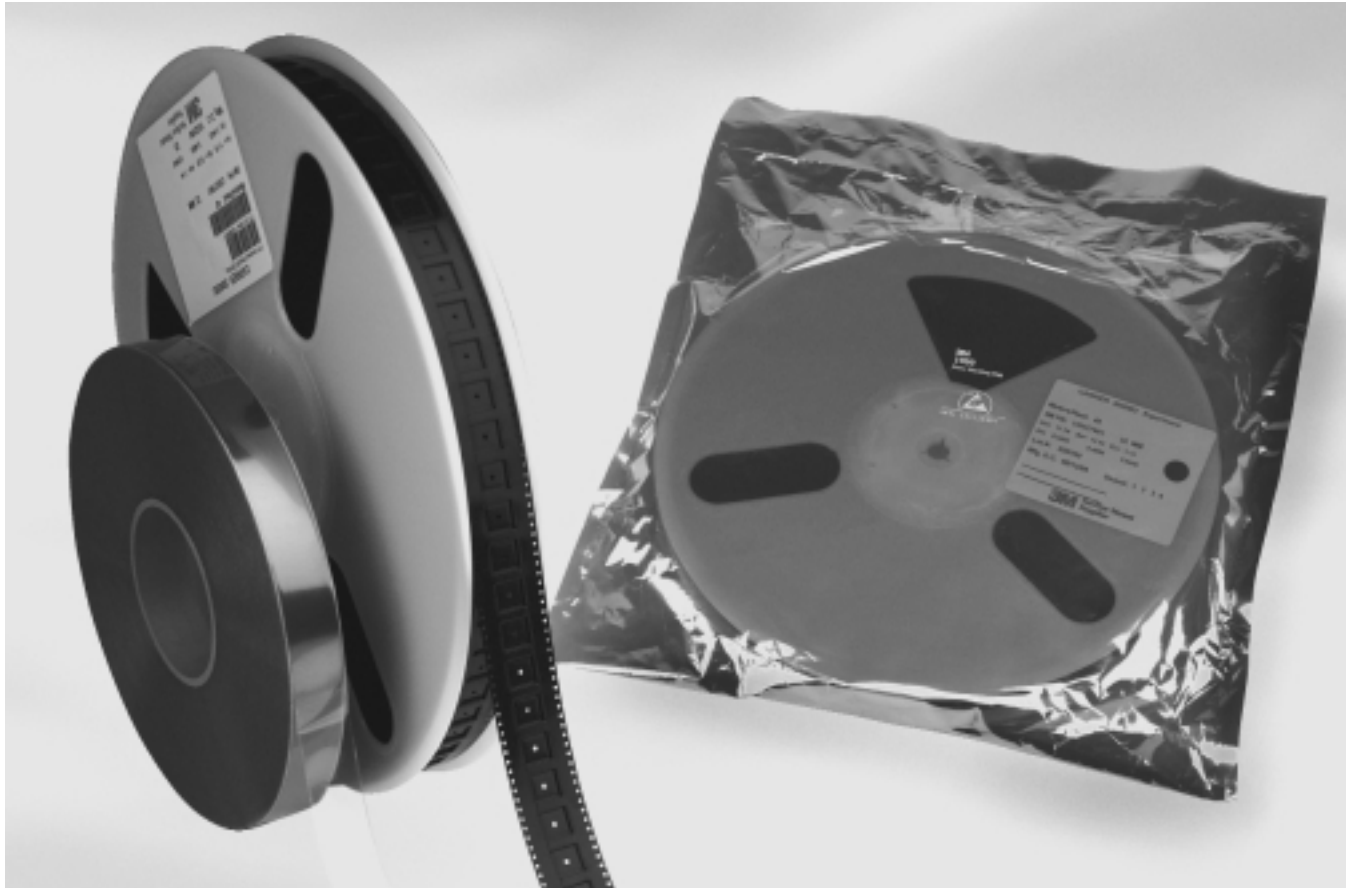




# Carrier Tape for Your Bare Die Applications



3M™ 3000BD Precision Carrier Tape is specifically designed for transporting bare die, bumped die, flip chip, chip-scale packaging and BGA components. It provides the following benefits:

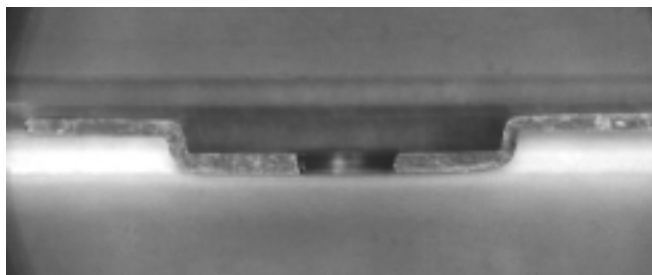
- **Component Protection** - 3M's 3000 BD Carrier Tape is designed with a +/- .002" pocket tolerance as opposed to the +/- .004" industry standard - the tight tolerance of the carrier tape as well as the specially designed corner protect features reduce the rotation of the component in the pocket as well as provide better protection to the component.
- **Flat Bottom Pocket for Packaging Full Matrix Array Components** - Most carrier tapes have features such as pedestals that raise the solder bumps off the bottom of the pocket because the bottom is not uniform. 3M's unique precision processing provides a flat bottom pocket to allow components to be packaged bump-side down. Bump-side down packaging thus allows the presentation of the component to your customers equipment without further handling.
- **Low Level of Cation and Anion** - The organic and inorganic contaminants in the packaging can create component failure. Since 3M uses a superior engineering grade polycarbonate material, 3M's 3000BD carrier tape has less than 5 ppm of these corrosive ions (Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>-</sup>, K<sup>+</sup>, Ca<sup>++</sup>).
- **Low Particle Count** - 3000BD carrier tape is cleaned and therefore has 60-70% less particles than standard carrier tapes. As the solder bump diameter and pitch continue to decrease in size, particulates will continue to be a concern to the industry.
- **Full Conductive ESD Protection** - The 3000BD carrier tape in combination with 3M™ 2666 Conductive PSA (pressure sensitive adhesive) Cover Tape provides ultimate ESD protection. The carrier tape is made with a homogenous engineering grade polycarbonate resin giving it volumetric conductive properties. The cover tape is designed with a conductive blocker film layer next to the component thus protecting the components from ESD issues and adhesive residue.

- **Prevents Part Migration** - The 3M™ 3000BD Carrier Tape, in combination with a 3M™ 2666 Conductive PSA cover tape, prevents part migration. The tight pocket with a +/- .002” tolerance in the carrier tape captures the component securely. The 2666 PSA cover tape design provides a flatter cover than standard HAA (heat activated adhesive) cover tapes, and provides a peel force with only +/- 10 grams variation as opposed to +/- 20 grams in standard HAA cover tapes.
- **Clean Room Compatible Packaging** - 3000BD is cleaned and packaged in a class 10,000 cleanroom environment. Each 13” plastic reel is sealed individually into a 3M™ 1900 Static Shielding Bag for protection.

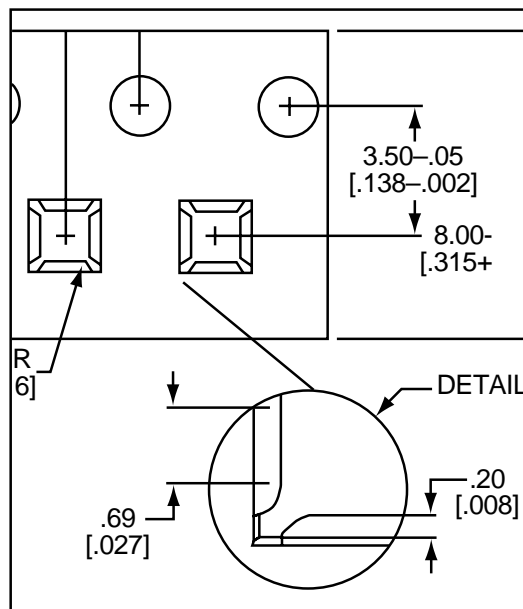
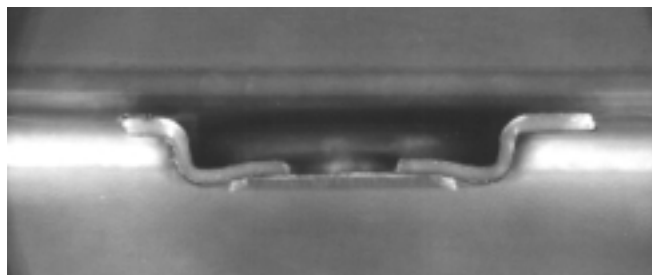
They are then placed in a polyethylene bag. The 3M 2666 PSA cover tape is provided on a plastic core and is also available in a double bag format for clean room compatibility.

- **EIA Compatible** - 3M 3000BD carrier tape is EIA compatible and therefore works on all standard processing equipment and does not require any additions or modifications.
- **High Speed Pick-n-Place** - The tape/reel format provides high speed/high volume component placement up to four times faster than standard tray type transportation.

Precision Polycarbonate Pocket



Typical Traditional Pocket



**Additional Information**

To request additional product information or to arrange for sales assistance, call toll free 1-800-666-8273. Address correspondence to: 3M Electronic Handling & Protection Division, 6801 River Place Blvd., Austin, TX 78726-9000. Our fax number is 1-800-826-8893.

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