

# Alternate Peel Strength Test

An ECIA Knowledge Document

Volume 1, Number 1

October 2009

Reaffirmed: June 2023



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This ECIA Knowledge Document was formulated under the cognizance of the Automated Component Handling Standards Committee.

Published by

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EIA Standards & Technology Department  
13873 Park Center Road, Suite 315  
Herndon, VA 20171

## EIA/ECA Automated Component Handling Committee

### Suggested Knowledge Base Entry    By Bill Aldeen, 10/21/09

#### **Alternate Peel Strength Test**

EIA-481, the recognized standard for packaging Surface Mount Devices for automated handling, describes a peel strength test in Section 4.11. The purpose of the test is to determine that the cover tape is attached to the carrier tape firmly enough to hold components in the pockets, but not too firmly to inhibit peeling off during feeding.

The standard test involves peeling back the entire cover tape and measuring the force required. Both seals are peeled off simultaneously.

The alternate test involves slicing the cover tape in two lengthwise, and measuring peel strength of each seal individually. This alternate test is not part of the EIA-481 standard, but may be of interest to some users.

The recommended peel strength for both tests is shown in the table below.

| All measurements to be taken using a calibrated scale        | RECOMMENDED PEEL STRENGTH FOR THE FOLLOWING CARRIER TAPE SIZES |                                   |                                   |
|--------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------|-----------------------------------|
|                                                              | 8 mm                                                           | 12 mm to 56 mm                    | 72 mm and wider                   |
| Standard Test: Checking both seals together<br>(per EIA-481) | 0.1 to 1.0 N<br>(10 to 100 grams)                              | 0.1 to 1.3 N<br>(10 to 130 grams) | 0.1 to 1.5 N<br>(10 to 150 grams) |
| Alternate Test: Checking one of the two seals individually   | 0.1 to 0.5 N<br>(10 to 50 grams)                               | 0.1 to 0.65 N<br>(10 to 65 grams) | 0.1 to 0.75 N<br>(10 to 75 grams) |