



# Technical Data Sheet

## 3M™ Electrically Debondable Tape 1100-075

### Product Description

3M™ Electrically Debondable Tape 1100-075 is a single layer adhesive transfer tape (ATT) featuring an electrically debondable thin PSA. When bonded to 2 conductive surfaces, the 1100-075 is electrically debondable. The electrically debondable feature enables a clean, quick, and safe breaking of this adhesive bond to enable rework, repair, and recycling of critical components

### Product Features

Reliable bonding strength in harsh conditions  
Quick, clean removal with low voltages

### Typical Physical Properties

Attribute Name	Value
Adhesive Thickness	0.075 mm
Adhesive Type	Specialty Acrylic
Tight Side Release Liner Thickness	0.075 mm
Color	Clear
Easy Side Release Liner Thickness	0.05 mm

### Typical Performance Characteristics

Substrate: Stainless Steel  
Test Condition: 10 mm/min

Attribute Name	Test Method	Value
Tensile Strength	ASTM D897	1.1 MPa

Substrate: Stainless Steel  
Temperature: 23 °C (73 °F)

Attribute Name	Test Method	Value
180° Peel Adhesion	ASTM D3330	0.75 N/mm <sup>1</sup>

<sup>1</sup> 300 mm/min (12 in/min)

Substrate: Stainless Steel  
Temperature: 23 °C (73 °F)

Attribute Name	Test Method	Test Condition	Value
Electrical Debond Time (Peel)	ASTM D3330	30V	10 s <sup>1</sup>
Electrical Debond Time (Peel)	ASTM D3330	9V	30 s <sup>1</sup>
Electrical Debond Time (Pushout)	ASTM D897	30V	60 s <sup>2</sup>
Electrical Debond Time (Pushout)	ASTM D897	9V	90 s <sup>2</sup>

<sup>1</sup> Time at indicated voltage resulting in 180° peel test falls below 0.1 N/mm

<sup>2</sup> Time at indicated voltage resulting in tensile pushout test falls below 0.3MPa

## **Application Guidelines**

The 3M™ Electrically Debondable Tape 1100-075 can be debonded by applying a low voltage across the two conductive, bonded surfaces. Current will move through the system causing debond on the low voltage side.

### **Steps to Debond**

From a power source, attach the low potential lead to the substrate that will debond, and the high potential lead to the substrate that will remain bonded.

Apply a small DC voltage, 5-50V, which will cause a current to flow through the system, creating a weak boundary layer at the PSA interface on the low potential side.

Afterwards, remove the power and open the bond.

## **Storage and Shelf Life**

The shelf life of 3M™ Electrically Debondable Tape 1100-075 is 12 months from the date of manufacture when stored in the original packaging materials below 40°C (104°F). It is best practice to avoid low humidity and/or high temperature storage conditions.

## **Certificate of Analysis (COA)**

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