



# Membrane Switch Adhesives

*Long-life formulations for die-cut laminations, circuit layer assembly, switch spacers, metal dome placement, and lead protection.*



With low cost, long life, outstanding environmental performance, and eye-catching graphics, membrane switches are found in more and more applications. They range from farm tractors and medical test systems to microwave ovens and fish finders. Whatever the application, the multiple layers of adhesives used to bond, insulate, and separate components help determine the reliability and service life of the switch.

From top to bottom of the switch, the demands on adhesive can vary depending on the type of switch, the materials assembled, and end use conditions. For

this reason, 3M offers a full range of adhesives with application-specific configurations for die-cut laminations, circuit layer assembly, switch spacers, metal dome placement, lead protection, and switch mounting.

3M proprietary adhesives have been proven in membrane switches for over 20 years. Features of the line include –

- **Exceptionally high cohesive strength** for long-term resistance to the stress of switch actuation. The keypad on parcel delivery computers, for example, are actuated constantly. With each

actuation, the overlay pulls on the adhesive while actuating the switch. 3M adhesives resist slippage, oozing, lifting, channeling, and buckling.

- **Outstanding resistance to hostile environments** such as high humidity and moisture, extreme temperature ranges, and/or UV light, e.g. process control panel in a foundry.
- **Excellent resistance to chemicals**, detergents, household cleaners, and solvents, e.g. control panels for janitorial chemical dispensers and home dishwashers.

# 3M™ Membrane Switch Adhesives

## Adhesive Platforms

### 100 MP\* Acrylic –

Highest performing 3M PSA with resistance to solvents and up to 500°F.

### 200MP High Performance Acrylic –

Excellent resistance to solvents and up to 400°F.

### 220 Industrial Acrylic –

Good chemical resistance and shear strength. Resists up to 350°F.

### 300MP High Strength Acrylic –

Bonds low surface energy (LSE) plastics and resists heat up to 250°F.

3M adhesives are available for graphic overlay attachment, die-cut laminations in switch contact areas, double-coated spacers for circuit separation, and single-coated spacers for switch assembly. Single-coated products seal and bond for circuit layers, metal dome placement, and lead protection.

Additional product information or sales assistance: 1-800-223-7427.

**Notes:** Technical information and data at right should be considered representative or typical only and should not be used for specification purposes.

\* Products in this family are 3M™ VHB™ Tapes offering 3M's highest strength.

\*\* Custom product.

## Product Availability

Product number	Adhesive platform	Tape or spacer thickness	Liner type	Layer thickness (mils) Adhesive/Carrier/Adhesive
<b>Double-lined Adhesive Transfer Tapes</b>				
7952MP	200MP	2 mils	58# PCK/58# PCK	2/0/0
7955MP		5 mils	58# PCK/58# PCK	5/0/0
7962MP		2 mils	83# PCK/58# PCK	2/0/0
7965MP		5 mils	83# PCK/58# PCK	5/0/0
7951	300MP	2 mils	58# PCK/58# PCK	2/0/0
9552	220	2 mils	58# PCK/58# PCK	2/0/0
9555		5 mils	58# PCK/58# PCK	5/0/0
<b>Double-coated Spacers</b>				
7979*	100MP	9 mils	58# PCK/58# PCK	2/5/2
7945MP	200MP	5 mils	58# PCK/58# PCK	2/1/2
7953MP		3.5 mils	58# PCK/58# PCK	1.5/0.5/1.5
7953MS**		3.5 mils	58# PCK	1.5/0.5/1.5
7953HL		3.5 mils	83# PCK	1.5/0.5/1.5
7956MP		6 mils	58# PCK/58# PCK	2/2/2
7956MWS		6 mils	58# PCK	2/2/2
7956WDL		6 mils	58# PCK/58# PCK	2/2/2
7957MP		7 mils	58# PCK/58# PCK	2/3/2
7959MP		9 mils	58# PCK/58# PCK	2/5/2
7961MP		11 mils	58# PCK/58# PCK	2/7/2
7964MP**		14 mils	58# PCK/58# PCK	2/7/5
7966MWS		9 mils	58# PCK	2/2/5
7966WDL		9 mils	58# PCK/58# PCK	2/2/5
7968MP**		8 mils	58# PCK/58# PCK	2/1/5
7970MP**		10 mils	58# PCK/58# PCK	2/3/5
7972MP**		12 mils	58# PCK/58# PCK	2/5/5
7973MP**		13 mils	58# PCK/58# PCK	5/3/5
7974MP**		13 mils	58# PCK/58# PCK	3/5/5
7975MP**		15 mils	58# PCK/58# PCK	5/5/5
7976MP**		12 mils	58# PCK/58# PCK	5/2/5
7978MP**		17 mils	58# PCK/58# PCK	5/5/7
7986MP**		14 mils	58# PCK/58# PCK	2/10/2
7987MP**		17 mils	58# PCK/58# PCK	5/7/5
8106HL**		6 mils	94# PCK/94# PCK	2/2/2
9045MP		5 mils	94# PCK/94# PCK	2/1/2
9056MP		6 mils	94# PCK/94# PCK	2/2/2
9057MP		7 mils	94# PCK/94# PCK	2/3/2
9059MP		9 mils	94# PCK/94# PCK	2/5/2
9061MP		11 mils	94# PCK/94# PCK	2/7/2
9553	220	3.5 mils	58# PCK/58# PCK	1.5/0.5/1.5
9557		6 mils	58# PCK/58# PCK	1.5/3/1.5
9559		8 mils	58# PCK/58# PCK	1.5/5/1.5
9561		10 mils	58# PCK/58# PCK	1.5/7/1.5
9563		13 mils	58# PCK/58# PCK	1.5/10/1.5
<b>Single-coated Spacers</b>				
7991MPW	200MP	2 mils	94# PCK	1/1/0
7992MP		4 mils	94# PCK	2/2/0
7992MPW		4 mils	94# PCK	2/2/0
7993MP		3 mils	94# PCK	2/1/0
7994MP		4 mils	58# PCK	2/2/0
7995MP		5 mils	94# PCK	2/3/0
7997MP		7 mils	94# PCK	2/5/0

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