



Membrane Switch Spacer/Data Page

FOD # 0149

Scotch™ 7993MP Single Side Membrane Switch Spacers 7995MP Single Side Membrane Switch Spacers 7997MP Single Side Membrane Switch Spacers

Description

<u>Product Number</u>	<u>Carrier Polyester</u>	<u>Adhesive Type - Caliper</u>	<u>Liner Polycoated Bleached Kraft</u>
7993MP	1.0	#200MP 2.0	90#
7995MP	3.0	#200MP 2.0	90#
7997MP	5.0	#200MP 2.0	90#

Applications

- Add a different thickness of adhesive to one side of a membrane switch to build a membrane switch spacer.
- Designed for use as a substrate for membrane switch circuitry.
- Hold metal domes in place
- Protect conductive leads

Features

- Long term, environmentally stable adhesive to resist U.V. light, chemicals, and temperatures to 300 degrees F (149 degrees C).
- High cohesive strength of the adhesive withstands repeated stresses of switch actuation.

Physical Properties

Typical values - not for specification use.

Initial adhesion: Dynamic Peel- 180 degrees ASTM D3330, PSTC 3	<u>Stainless Steel Oz./In.</u>	<u>Stainless Steel N/100mm</u>
7993MP	34	36
7995MP	53	58
7997MP	62	66

Environmental Performance

Typical values - not for specification use.

- Temperature Range: Low: -40 degrees F (-40 degrees C) High long term (days, weeks): 250 degrees F (121 degrees C) High short term (min, hours): 300 degrees F (149 degrees C)
- Chemical Resistance: Solvent resistance is excellent when this product is properly applied to impervious materials. The adhesive resists softening through edge contact with mild acids, alkalies, oil, gasoline, Kerosene, JP-4 fuel and many other solvents. NOT RECOMMENDED FOR TOTAL IMMERSION.
- Moisture & Humidity Resistance: No adverse effect on the bond after exposure to 100% R.H. at 100 degrees F (38 degrees C).
- Shelf Life: Twelve months from date of receipt by customer when stored in cartons at 70 degrees F (21 degrees C) at 50% R.H.
- Bond Build-Up: The bond strength of Scotch #200MP "Hi-Performance" Acrylic Adhesive increases as a function of time and temperature.
- U.V. Resistance: Adhesive is resistant to oxidation and ozone when exposed to air or sunlight (UV).

Processing

- Die-Cutting: Steel rule or punch press die-cuttable.
- Roll Laminating: Use rubber over steel roll set up with firm application pressure. Make adhesive to substrate contact at nip area only to exclude air entrapment.

Special Considerations

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.

To obtain adhesion, the bonding surfaces must be clean, dry, and smooth. Some typical surface cleaning solvents are isopropyl alcohol or heptane. Consult manufacturer's Material Safety Data Sheet for proper handling and storage of solvents.

Ideal tape application temperature range is 70 degrees F (21 degrees C) to 100 degrees F (38 degrees C). Initial tape application to surfaces at temperatures below 50 degrees F (10 degrees C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

2/19/90

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