



Membrane Switch Spacer 7986MP

Product Data Sheet

Updated : September 2022

Supersedes : 29th April 2004

Physical Properties

Not for specification purposes

Release Liner	100 micron 58# Polycoated Kraft
Adhesive	50 micron #200 "High Performance" Acrylic
Carrier	250 micron Polyester Film
Adhesive	50 micron #200 "High Performance" Acrylic
Liner	100 micron 58# Polycoated Kraft
Shelf Life	12 months from date of manufacture by 3M if stored at room temperature condition in cool, dry and sun protected room.

Features:

- Long term environmentally stable bond.
- High cohesive strength to withstand repeated stresses from switch activation.
- Excellent temperature, humidity and chemical resistance
- High bond strength to high surface energy plastics such as polyester and polycarbonate.

Applications

- Spacer for membrane switch / keyboard circuits
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Performance Characteristics Not for specification purposes	Temperature Range	Low: -40°F (-40C) High Long Term (days/weeks) : 250°F (121°C) High Short Term (minutes/hours): 300°F (149°C).
	Chemical Resistance	Solvent resistance is excellent when this product is properly applied to impervious materials. The adhesive resist softening through edge contact with mild acids, Alkalis, oil, gasoline, kerosene, JP-4 fuel and many other solvents. Not recommended to total immersion.
	Dielectric Strength (ASTM D149-92)	1.5 KV/mil
	Insulation Resistance (MIL-I-46058C)	5.7×10^{11} ohms
	Volume Resistivity (ASTM D257-92)	2.7×10^{15} ohm-cm
	Surface Resistivity (ASTM D257-92)	$>5.6 \times 10^{16}$ ohms/square
	Moisture & Humidity Resistance	No adverse effect on the bond after exposure to 100% Relative Humidity at 38°C.
	Bond Build Up	The bond strength of Scotch #200 Hi-Performance Acrylic adhesive increases as a function of time and temperature.
	U.V. Resistance	Adhesive is very resistant to oxidisation and ozone when exposed to air or sunlight (U.V.).

Application Techniques

- Bond strength is dependent upon the amount of adhesive surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry and smooth. Some typical surface cleaning solvents are isopropyl alcohol or heptane. Use proper safety precautions for handling solvents.
- Ideal tape application temperature range is 70°F to 100°F.
- Application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

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