Application Profile

Market: Appliance
Application Description: Used to rigidize large components on a printed circuit board of a dryer.

Application Method
3M™ Scotch-Weld™ EPX™ Applicator and 3M™ Scotch-Weld™ Hot Melt Applicator

Key Application Requirements
Vibration control, quick and easy applications.

Product Replaced
RTV silicones.

Benefits/Advantages To Customer
Rigidizes: Helps eliminate shock and vibration that could cause component solder joint failure, reducing cost due to damaged components and circuit boards.
Cure time: Fast set time helps lower cost of processing and increases convenience.
Process

Electronic manufactures fabricate printed circuit boards, then ship them to an appliance component manufacturer for installation in the control system. Finished control systems are shipped to the appliance manufacturer for installation on the assembly line.

Large axial leaded capacitors or other components provide rigidity. A bead of adhesive on each interface helps provide shock and vibration resistance while relieving stress that can cause component failure from soldered leads. Components weighing more than ¼ oz. per axial lead are often rigidized, in accordance with IPC-CM-770B guidelines. Such heavy components are often used for assembler of power supply and power amplifier boards.

Stabilizing Loose Components

Stabilizing loose components helps prevent loosening of solder joints, provides faster set, lower cost and is more convenient to use than many RTV silicones, which are often used in this application.

Fixing and Vibration Protection

Fixing and vibration protection helps reduce internal component damage due to vibration and shock.

Product

<table>
<thead>
<tr>
<th>Product</th>
<th>Advantages</th>
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</thead>
<tbody>
<tr>
<td>3M™ Scotch-Weld™ Hot Melt Adhesive 3779</td>
<td>High heat resistance</td>
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<tr>
<td>3M™ Scotch-Weld™ Hot Melt Adhesive 3748</td>
<td>Non-corrosive to copper</td>
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<tr>
<td>3M™ Scotch-Weld™ Hot Melt Adhesive 3748VO</td>
<td>Meets UL 94 VO requirements</td>
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<tr>
<td>3M™ Scotch-Weld™ Epoxy Adhesive DP-190</td>
<td>Long work-life, flexible, gray and translucent</td>
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<tr>
<td>3M™ Scotch-Weld™ Epoxy Adhesive DP-110</td>
<td>Excellent peel strength, shock and impact resistant</td>
</tr>
<tr>
<td>3M™ Scotch-Weld™ Epoxy Adhesive DP-105</td>
<td>Very flexible</td>
</tr>
</tbody>
</table>

Key Decision Makers

Manufacturing and Production Managers

SIC Codes

3633 – Household Laundry Appliances
3639 – Household Appliances
**Market:** Appliance

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**For Additional Information**


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**Product Use**

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**3M**

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