Elastomer Bonding

Service

• Thorough Bond Coverage
• Provides Support for Fragile Target Materials
• Higher Temperature Capability Than Indium Bonding
• Bonded at Low Temperatures (50°C - 100°C)
• NASA “A” rating (undergoes less than a 1% total mass change at 150°C at 1 x 10^-7 Torr for 24 hrs)
• Does not absorb any moisture
• Equipped to handle cycles between vacuum and atmosphere

Bonding Process
• Target bonding surface may be coated prior to bonding to improve adhesion
• Bonding surfaces primed and elastomer mixture prepared for complete bond coverage
• Accurate alignment of target on backing plate
• Elastomer bonds are shear tested
• Bonded target assemblies are cleaned and ready for use in vacuum

Options
• Wide range of sizes and shapes
• Multi-tile assemblies
• Complex backing plate configurations
• Compatible with most target materials

Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Maximum Operating Temperature</td>
<td>250°C</td>
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<tr>
<td>Thermal Conductivity</td>
<td>54 W/m·K</td>
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<tr>
<td>Coefficient of Thermal Expansion</td>
<td>2.2 x 10^-4 K^-1</td>
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<tr>
<td>Electrical Resistivity</td>
<td>0.0476 Ohm-cm</td>
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<tr>
<td>Bond Coverage</td>
<td>&gt;98%</td>
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<tr>
<td>Bond Line Thickness</td>
<td>0.010”-0.025”</td>
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