

**PRODUCT DESCRIPTION:**

AA-DUCT 904 is a single component, heat curing, conductive epoxy that was designed for ease in handling. This high performance conductive epoxy cures quickly at elevated temperatures making it ideally suited for rapid processing and assembly.

AA-DUCT 904 offers excellent mechanical, electrical, and physical properties at continuous operating temperatures up to 175°C. This versatile silver conductive adhesive can be used for chip bonding in micro and opto-electronic hybrid circuit fabrication.

AA-DUCT 904 has also been used in microwave applications for EMI and FRI shielding, for assembly and repair of circuit boards and electronic component manufacturing.

AA-DUCT 904 is a smooth, soft paste that can be applied by hand application, automatic dispensers, screen-printing, transfer or stamping techniques. It is available in both a lower and higher viscosity grade for use in a variety of dispensing equipment and application techniques.

**CURED PROPERTIES:**

<b>Hardness, Shore D</b>	83
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**PRODUCT PROPERTIES:**

<b>Appearance</b>	Silver
<b>Cure Type</b>	Heat cure
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• High strength</li> <li>• Excellent mechanical, electrical properties</li> </ul>
<b>Substrates</b>	Excellent choice for Integrated Circuits, aluminum, copper, magnesium, steel, bronze, nickel, ceramic, glass, phenolic and G-10 epoxy glass boards.
<b>Typical Applications</b>	Microwave applications for EMI and FRI shielding, for assembly and repair of circuit boards and electronic component manufacturing.

**GENERAL INFORMATION:**

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

**CURE SCHEDULE:**

<b>2 hours</b>	@ 125°C
<b>1 hour</b>	@ 150°C
<b>1/2 hours</b>	@ 175°C

**UNCURED PROPERTIES:**

<b>Viscosity @ 25 °C cps</b>	200,000
<b>Shelf life</b>	6 Months
<b>Density</b>	3.6

**THERMAL PROPERTIES:**

<b>Thermal Conductivity, btu/hr/ft<sup>2</sup>/°F/in:</b>	16.1
<b>Coefficient of Thermal Expansion</b>	60x 10 <sup>-6</sup> (in/in) C
<b>Operating Temperature</b>	-55°C to +175°C
	Intermit. to 325

**ELECTRICAL PROPERTIES:**

<b>Volume Resistivity ohm. cm</b>	< 0.001
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**NASA OUTGASSING RESULTS:**

<b>TML (Total Mass Loss) % 0.38</b>	TML (Total Mass Loss) % 0.38
<b>CVCM (Collected Volatile Condensable Materials) % 0.01</b>	CVCM (Collected Volatile Condensable Materials) % 0.01
<b>WVR (Water Vapor Recovery) % 0.07</b>	WVR (Water Vapor Recovery) % 0.07

**HOW TO USE:**

1. Carefully clean and dry all surfaces to be bonded.
2. Apply AA-DUCT 904 adhesive to the prepared surfaces.
3. Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.

**AVAILABILITY:**

This epoxy can be supplied in many different packages.

**Atom Adhesives**

Email: [info@atomadhesives.com](mailto:info@atomadhesives.com)

200 Allens Ave, Providence, RI 02903

Phone: (888) 522-6742 - Fax: (877) 522-6742