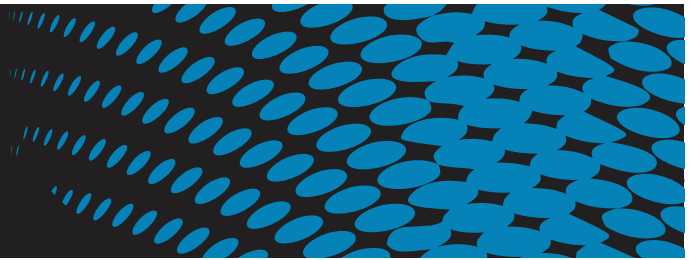


TS1334

High Conductivity Stretchable Adhesive



Product Description

TS1334 is a stretchable adhesive with superior electrical conductivity. It is a silver filled, one component epoxy that can be deposited using stencil, syringe, or jet dispensing. The adhesive was designed for bonding components to compliant substrates and remains stretchable following thermal cure. This highly compliant material lowers the stress risers at the bonded interface and accommodates bending and flexing in a variety of applications

Product Benefits

TS1334 is compatible with flexible and stretchable systems where high electrical conductivity is required. This stretchable conductive adhesive accommodates bending and stretching along the bond line and improves interconnect robustness and reliability. TS1334 can be deposited via stencil, syringe, or jet dispensing and cures with low shrink-age. The combination of high electrical conductivity, high shear strength, and high adhesion to a broad range of materials makes it a good choice for bonding in many flexible and stretchable applications. It is also appropriate for bonding rigid components in packages with large thermally induced strains.

Typical Properties

Physical State	Paste/Ink
Color	Silver
Viscosity ¹	
1 s ⁻¹	100 Pa·s
10 s ⁻¹	27 Pa·s
100 s ⁻¹	12 Pa·s
Density	3.2 g/mL
Shelf Life at -40°C ²	12 Months
Pot Life ²	12-14 hours
Weight loss on cure	< 1 %
Weight loss @ 300°C TGA	< 3%

¹ Anton Paar MCR302 at 25°C

² Storage at below or greater than can adversely affect product properties

Typical Processing Parameters

Deposition	Stencil / Syringe / Jet
Recommended Curing Conditions	
60 minutes	140°C
30 minutes	150°C

For performance reported, the material was processed at 140°C for 60 minutes.

Typical Performance

Volume Resistivity ³ 140°C for 60 min in box oven	< 2.0 x 10 ⁻⁴ Ω*cm
Lap Shear Strength	> 1,500 kPa
Tg	-10°C
Stretch	Up to 40%

³ Measured 24 hours after suggested cure cycle.



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Caution

Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

Disclaimer

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