

SHIELDOSEAL 3991

Creates a electrically and thermally conductive connection between components. Used for ESD and EMI shielding applications.



Shieldoseal is a 65-durometer adhesive sealant that is made of a one-part, electrically conductive silicone-based adhesive with micron-sized nickel-coated graphite particles with excellent filling properties. Shieldoseal cures quickly at room temperature (RTV) in the presence of atmospheric moisture. It can cure on metals (copper, aluminum, stainless steel, brass, etc.), ceramics, and most plastics and can be used in environments from -55 up to + 150 °C without the loss of physical or electrical properties. The material remains as elastic as rubber and is homogeneously conductive.

Shieldoseal can be used to bond conductive elastomer gaskets field conductive gaskets, to attach shielding windows to edge frames, bond conductive elastomer gaskets, and for EMI and environmental protection as a sealant. Shieldoseal is a high-performance non-corrosive silicone material that meets the requirements of MIL-A-46146 and will form a cured skin within 60 minutes without the formation of corrosive byproducts of exposure to atmospheric moisture. Shieldoseal is a thixotropic paste that can be published on vertical surfaces without prolapsing.

SPECIFICATIONS

| | |
|-------------------------------|--|
| Elastomer adhesive | Silicone |
| Filler material | Nickel coated graphite |
| Density | 2 g/cm |
| Hardness | 60 Shore |
| Volume resistivity | <0.01 ohm/cm |
| Adhesion | >100N/cm |
| Attenuation 100 MHz to 10 GHz | 80- 115 dB |
| Elongation | 100% |
| Operating temperature | -55 to 150 °C |
| Metal with metal | Good |
| Metal with RFI gasket | Good |
| RFI gasket with RFI gasket | Good |
| Shelf life | 4 months at room temperature (20°C) If stored in a cooler (at +/- 7°C) the shelf life can be extended |

APPLICATIONS

- Vibrations and/or shock resistant sealant/adhesive for electronic assemblies
- Environmental sealing
- ESD control/grounding
- Electrical connection/bonding of materials with dissimilar thermal expansion coefficients i.e. mounting shielding windows EMI shielding with environmental sealing

CURING

| Specification | Unit | 3991 |
|----------------------------|-------|----------|
| Curing at room temperature | 21 °C | Yes |
| Tack free | Min. | 60 |
| Light handling | Hrs. | 12 - 24 |
| Full cure | Hrs. | 96 - 144 |
| Odorless | | No |

CAN BE ORDERED SEPARATELY:



3991-M : Shieldoseal manual gun



3991-P : Shieldoseal pneumatic gun

ORDER EXAMPLE

Part number

- 3991** : Shieldoseal 130 g plastic cartridge
- 3991-M** : Shieldoseal manual gun
- 3991-P** : Shieldoseal pneumatic gun