

Frequently Asked Questions

Circuitworks® Silicone Free Heat Sink Grease, CW7270

1. What is heat sink grease?

Circuit boards produce large amounts of heat that has to be transferred from the components in order to prevent damage. This heat is usually removed by a heat sink, a component attached to the microprocessor. The better the contact between the processor and the heat sink, the faster and more efficiently the heat transfer will occur. Heat sink grease facilitates heat transfer away from electrical/electronic components by filling the voids between the surface of the component and the surface of the heat sink. The heat sink grease is produced from materials that allow heat to pass through them quickly, a quality known as thermal conductivity. These materials are blended into grease that fills the voids to improve heat transfer.

2. What is the difference between a silicone and non silicone heat sink grease?

The obvious difference is that one product contains silicone oil and the other doesn't. Greases are made with oils and other compounds to impart the proper performance characteristics. Silicone heat sink grease contains silicone oil, which provides excellent performance in situations where high temperature stability is required. However, silicone oil can bleed from the heat sink compound, resulting in a number of negative results. The silicone oil can prevent coatings from adhering to the surface and cause insulation of contacts. It can also promote high dust accumulation.

Circuitworks® Silicone Free Heat Sink Grease is formulated with an oil that provides the high temperature stability without the negatives associated with silicone-based heat sink greases.

3. How do I use heat sink grease?

Make sure the area for grease application is clean and dry. Apply a small amount of the grease to the bottom of the heat sink and spread evenly, and attach the heat sink. Remember to use as little as possible, as using too much can decrease the efficiency of the heat sink.

4. What are its features and benefits?

Features:

- Excellent thermal conductivity
- High dielectric strength/not electrically conductive
- Exceptionally low bleed

Benefits:

- Rapidly transfers heat from surfaces and components
- Will not short components
- No creep or migration over a wide temperature range

5. Does Circuitworks® Silicone Free Heat Sink Grease meet MIL-DTL-47113D, Type II?

Circuitworks® Silicone Free Heat Sink Grease exceeds the MIL-DTL-47113D Type II performance specifications.

6. How is the product packaged?

The product is packaged in a convenient syringe containing 7 grams of grease.

FAQ

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7. What is the shelf life?

Five (5) years from the manufacturing date.

8. How do I get a sample?

Contact your ITW Chemtronics® Sales Manager or contact ITW Chemtronics® Customer Service.

For more information, contact:

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