

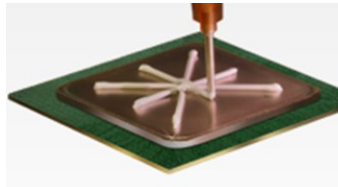
## X23-7921-5 (Non-Solvent) TECHNICAL DATA SHEET

### Product description

Thermal grease, X23-7921-5, is a Non-Solvent thermal interface material developed and manufactured by Shin-Etsu Chemical Co., Ltd. Shin-Etsu MicroSi's X23-7921-5 exceeds thermal management requirements of high-performance semiconductor devices. Through superior heat dissipation, the X23-7921-5 allows electronic devices to remain cooler and increases their long term reliability. Typical applications include semiconductor devices: power transistors, ICs, CPUs, stacked memory modules or any application that requires a thermal solution.

### Product characteristics

- Excellent thermal resistance (TR) and thermal conductivity (TC)
- Easily applied via dispensing, stencil printing, or screen printing methods
- Stable homogeneous mixture for consistent thermal performance
- RoHS and REACH Compliant
- High volume production product from a proven industry leader
- Available worldwide through established supply chain network



### Packages

SEM's X23-7921-5 material is available in several cost effective packages offering unique advantages:

- **Syringes** offer most flexibility, with the ability to utilize the same product package for production and field requirements

Packaging Description	X23-7921-5
Syringes	0.5 gm, 1.0 gm
Cartridges	55 gm
Bulk	1 kg can
Custom Sizes Available	
Storage Conditions	32°F to 85°F

### General properties

Attributes	Typical Values
Color	Gray
Viscosity @25°C(Pa-s)	360
Specific Gravity	2.8
Thermal Conductivity * (W/m °K)	6.0
Thermal Resistance** mm <sup>2</sup> ·K/W	5.0
Bond Line Thickness (um) @20psi	25

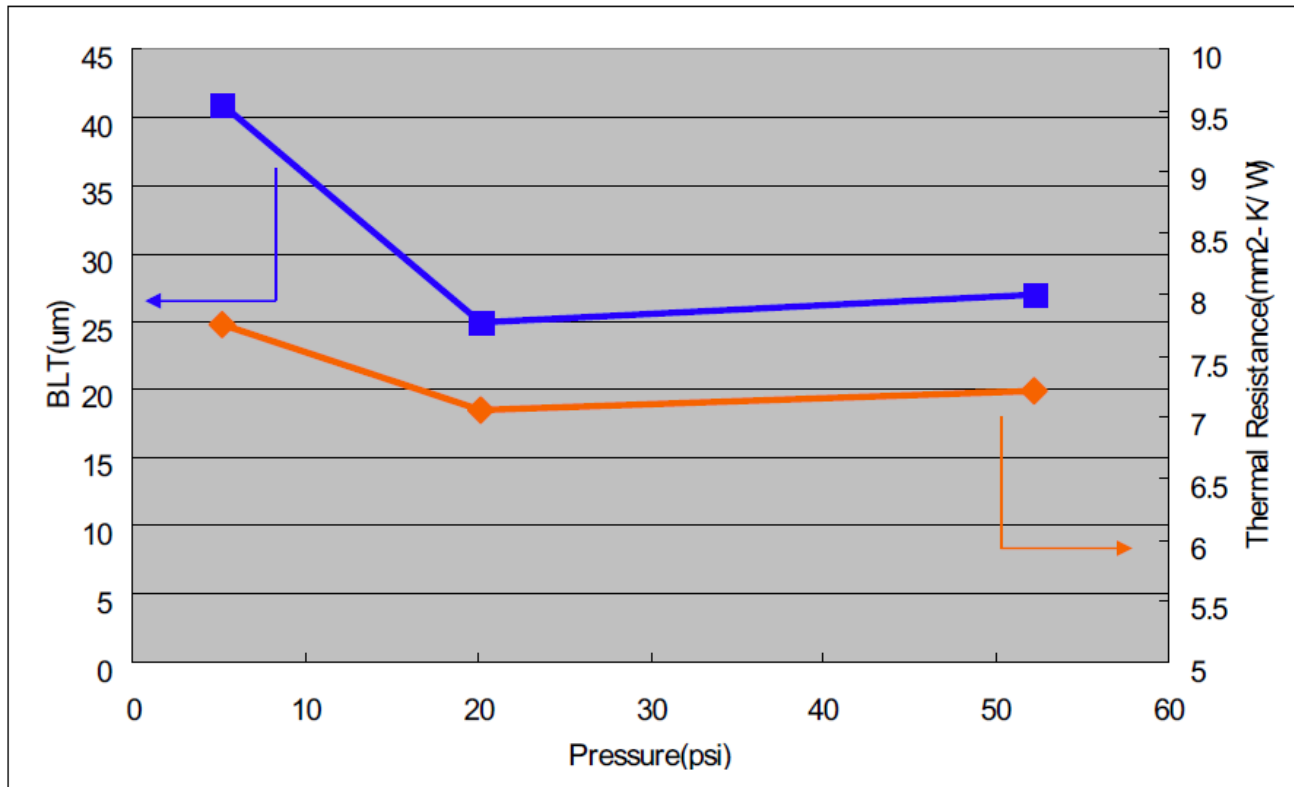
\*Measured with hot disc method \*\* Measured with laser-flash Method

- **Cartridges** can be utilized with either manual, automated or silk-screening equipment. The delivery system allows dispensing of the material, while protecting the integrity and exposure level of the unused portion.
- **Bulk** purchases with the lowest unit cost, are available for large scale production facilities where material is consumed at a rapid rate.



# X23-7921-5

Pressure (psi)	BLT (um)	Thermal Resistance (mm <sup>2</sup> -K/W)
5.2	41	7.76
20.2	25	7.05
52.2	27	7.22



Please contact:

**Shin-Etsu MicroSi**

**1.888.642.7674** [www.microsi.com](http://www.microsi.com)



## Caution

**Shin-Etsu MicroSi (SEM)** has been notified by customers that they were negatively impacted by using unauthorized and/or counterfeit thermal interface materials being sold as Shin-Etsu materials. Please note that Shin-Etsu Chemical Co., Ltd. And SEM, Inc. are not in a position to take any responsibility for the said unauthorized materials. Feel free to contact SEM, if you have any questions regarding this.

To ensure safety, follow the precautions stated in the material safety data sheet and technical references.

Typical values of different parameters have been shared in this sheet. It's the responsibility of the Purchasers to qualify the products for their respective applications. The contents in this document are subject to revision without notice to reflect latest data.

Permission is required to reprint our data.



**“WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).”