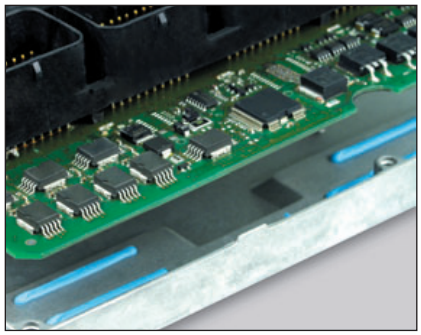
Gap Filler 3500S35 (Two-Part)

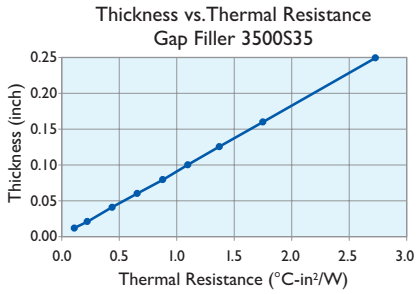
Thermally Conductive Liquid Gap Filling Material

Features and Benefits

- Thermal conductivity: 3.6 W/m-K
- Thixotropic nature makes it easy to dispense
- Two-part formulation for easy storage
- Ultra-conforming — designed for fragile and low-stress applications
- Ambient or accelerated cure schedules



Gap Filler 3500S35 is the technology leader in thermally conductive, liquid gap filling materials, featuring ultra-high thermal performance and superior softness. The material is a two-component, cured either at room or elevated temperature. Prior to curing, the material maintains good thixotropic characteristics as well as low viscosity. The result is a gel-like liquid material designed to fill air gaps and voids yet flow when acted upon by an external force (e.g. dispensing or assembly process). The material is an excellent solution for interfacing fragile components with high topography and/or stack-up tolerances to a universal heat sink or housing. Once cured, it remains a low modulus elastomer designed to assist in relieving CTE stresses during thermal cycling yet maintain enough modulus to prevent pump-out from the interface. Gap Filler 3500S35 will lightly adhere to surfaces, thus improving surface area contact. Gap Filler 3500S35 is not designed to be a structural adhesive.



TYPICAL PROPERTIES OF GAP FILLER 3500S35			
PROPERTY AS SUPPLIED	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color / Part A	White	White	Visual
Color / Part B	Blue	Blue	Visual
Viscosity as Mixed (cps) (1)	150,000	150,000	ASTM D2196
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Density (g/cc)	2.9	2.9	ASTM D792
Mix Ratio	1:1	1:1	—
Shelf Life @ 25°C (months)	5	5	—
PROPERTY AS CURED			
Color	Blue	Blue	Visual
Hardness (Shore 00) (2)	32	32	ASTM D2240
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL AS CURED			
Dielectric Strength (Vac/mil)	275	275	ASTM D149
Dielectric Constant (1000 Hz)	8.0	8.0	ASTM D150
Volume Resistivity (Ohm-meter)	$4x10^9$	$4x10^9$	ASTM D257
Flame Rating	V-O (Pending)	V-O (Pending)	U.L. 94
THERMAL AS CURED			
Thermal Conductivity (W/m-K)	3.6	3.6	ASTM D5470
CURE SCHEDULE			
Pot Life @ 25°C (min) (3)	60	60	—
Cure @ 25°C (hrs) (4)	15	15	—
Cure @ 100°C (min) (4)	30	30	—

1) Brookfield RV, Heli-Path, Spindle TF @ 20 rpm, 25°C.
2) Shore 00 hardness scale, cured at 100°C for 30 minutes.
3) Working life as a liquid; time for viscosity to double.
4) Cure schedule (rheometer - time to read 90% cure).

Typical Applications Include:

- Automotive electronics
- Discrete components to housing
- PCBA to housing
- Fiber optic telecommunications equipment

Configurations Available:

- Supplied in cartridge or kit form

Building a Part Number

GF3500S35 – 00 – 60 – 400cc – NA

- Section A: GF3500S35 = Gap Filler 3500S35 Material
- Section B: 00 = No spacer beads; 07 = 0.007" spacer beads
- Section C: Pot Life: 60 = 60 minutes
- Section D: Cartridges: 50cc = 50.0cc, 400cc = 400.0cc; Kits: 1200cc = 1200.0cc, or 10G = 10 gallon
- Section E: NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Standard Options

example

Note: To build a part number, visit our website at www.bergquistcompany.com.

Gap Pad® U.S. Patent 5,679,457 and others.

THE BERGQUIST COMPANY

www.bergquistcompany.com

The Bergquist Company - North American Headquarters
18930 West 78th Street
Chanhassen, MN 55317
Phone: 800-347-4572
Fax: 952-835-0430

The Bergquist Company - Europe
Bramenberg 9a, 3755 BT Eemnes
Netherlands
Phone: 31-35-5380684
Fax: 31-35-5380295

The Bergquist Company - China
Rm. 7C, Aihe Mansion
No. 629 Ling Ling Road
Shanghai, China 200030
Ph: 86-21-6464-2206
Fax: 86-21-6464-2209

PDS_10144_GF_3500S35_0705