BERGQUIST

Technical Data Sheet

Gap Filler 3500S35 (Two-Part)

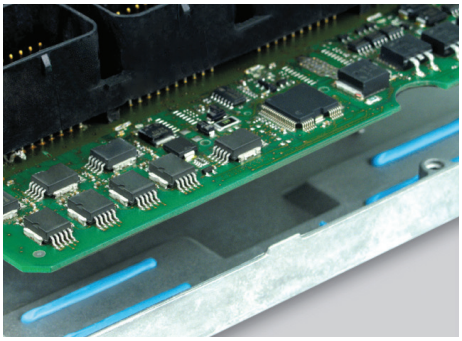
February 2015

PRODUCT DESCRIPTION

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 a two-component liquid gap filling material, cured at either room or elevated temperature, featuring ultra-high thermal performance and superior softness. 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.

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

TYPICAL PROPERTIES OF GAP FILLER 3500S35

PROPERTY	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
Density (g/cc)	3.0	3.0	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)	35	35	ASTM D2240
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL AS CURED			
Dielectric Strength (V/mil)	275	275	ASTM D149
Dielectric Constant (1000 Hz)	8.0	8.0	ASTM D150
Volume Resistivity (Ohm-meter)	10^9	10^9	ASTM D257
Flame Rating	V-O	V-O	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) Thirty second delay value Shore 00 hardness scale.
3) Time for viscosity to double.
4) Cure schedule (rheometer - time to read 90% cure)

TYPICAL APPLICATIONS INCLUDE

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

CONFIGURATIONS AVAILABLE

- Supplied in cartridge and kit form

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